

## Supporting Information: Melting temperature measurement and mesoscopic evaluation of single, double and triple DNA mismatches

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The entries in some of the following tables are hyperlinked for convenience (marked in red). However, for specific parameter searches accessing our simplified web site may be more convenient: <https://bioinf.fisica.ufmg.br/app/search-mismatch.pl>.

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Table S1. Sequences used in this work, their measured melting temperatures  $T_i$ , the corresponding predicted temperatures  $T'_i$ , and the melting index  $\tau$  used in main text, Eq. (3). Sequences are shown in decreasing order  $i$  of the measured temperature  $T_i$ . Shown are the central parts  $N_1N_3N_5/N_2N_4N_6$  of the full sequence given in the main text. All temperatures are given in  $^{\circ}\text{C}$ , and the melting index  $\tau$  is adimensional. Sequences containing single mismatches are highlighted in light red, double mismatches in light blue and triple mismatches in yellow.

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
1	GCG/CGC	69.3	71.47	3.8891	2	CGC/GCG	69.1	69.73	3.8559	3	GGC/CCG	68.9	69.73	3.8559
4	GCC/CGG	68.7	69.73	3.8559	5	CGG/GCC	68.2	70.50	3.8707	6	CCG/GGC	68.2	70.50	3.8707
7	GGG/CCC	67.7	70.50	3.8707	8	CCC/GGG	67.7	69.10	3.8438	9	TGC/ACG	67.5	66.01	3.7847
10	GAC/CTG	67.2	65.46	3.7743	11	GCA/CGT	67.1	66.81	3.8000	12	TCG/AGC	66.6	66.24	3.7892
13	GGA/CCT	66.6	66.74	3.7988	14	CGA/GCT	66.5	66.74	3.7988	15	CAG/GTC	66.5	64.82	3.7621
16	GAG/CTC	66.5	66.24	3.7892	17	GCT/CGA	66.4	64.24	3.7509	18	CAC/GTG	66.4	64.03	3.7469
19	GTC/CAG	66.4	65.46	3.7743	20	GTG/CAC	66.2	65.46	3.7743	21	CGT/GCA	66.2	63.94	3.7451
22	AGC/TCG	66.1	66.01	3.7847	23	TCC/AGG	66.1	64.82	3.7621	24	CCA/GGT	66.0	65.35	3.7721
25	AGG/TCC	66.0	64.82	3.7621	26	GGT/CCA	66.0	63.94	3.7451	27	CTG/GAC	65.9	64.82	3.7621
28	GGC/CGG	65.9	64.44	3.7547	29	CTC/GAG	65.8	64.82	3.7621	30	TGG/ACC	65.5	64.82	3.7621
31	ACG/TGC	65.4	65.46	3.7743	32	ACC/TGG	65.2	64.03	3.7469	33	GAC/CGG	65.2	63.64	3.7394
34	TTG/AAC	64.9	60.94	3.6878	35	ATC/TAG	64.8	61.20	3.6928	36	GAA/CTT	64.7	62.28	3.7135
37	CAA/GTT	64.5	61.46	3.6977	38	GAG/AGC	64.5	64.76	3.7609	39	AAC/TTG	64.5	60.17	3.6730
40	CCT/GGA	64.4	63.29	3.7328	41	TTC/AAG	64.4	60.94	3.6878	42	TGA/ACT	64.4	60.94	3.6878
43	TCA/AGT	64.2	60.94	3.6878	44	AGA/TCT	64.2	60.94	3.6878	45	GAT/CTA	64.1	60.38	3.6771
46	GGC/CAG	64.0	63.64	3.7394	47	GTA/CAT	63.9	60.10	3.6718	48	GGG/CAC	63.8	63.15	3.7300
49	ACG/GGC	63.8	63.15	3.7300	50	AAG/TTC	63.8	60.94	3.6878	51	CGA/GAG	63.8	63.29	3.7328
52	CGG/GCA	63.8	65.13	3.7679	53	GGG/CGC	63.7	63.87	3.7439	54	GGG/CCG	63.7	64.68	3.7594
55	ATG/TAC	63.6	61.20	3.6928	56	GTG/CGC	63.6	62.10	3.7100	57	GCG/GGC	63.6	63.87	3.7439
58	GTT/CAA	63.6	60.10	3.6718	59	TAG/ATC	63.6	58.91	3.6490	60	CAC/GGG	63.6	62.23	3.7126
61	TAC/ATG	63.6	58.44	3.6399	62	CTA/GAT	63.6	59.45	3.6592	63	GAC/AGG	63.5	63.20	3.7310
64	GTC/CGG	63.5	61.06	3.6901	65	GGC/CTG	63.5	61.06	3.6901	66	GCG/CGT	63.5	64.35	3.7530
67	GGT/CCG	63.4	64.01	3.7466	68	GCT/CGG	63.2	63.69	3.7405	69	GCC/GGG	63.2	62.90	3.7253
70	GGC/ACG	63.1	63.41	3.7350	71	GGG/CCA	63.1	65.13	3.7679	72	GCG/AGC	63.1	64.15	3.7493
73	TCT/AGA	63.0	58.91	3.6490	74	CAT/GTA	63.0	59.72	3.6644	75	TGC/GCG	63.0	63.77	3.7419
76	ACA/TGT	63.0	60.17	3.6730	77	GCG/CGA	63.0	64.13	3.7487	78	GCA/CGG	63.0	63.16	3.7303
79	TGG/GCC	62.9	63.05	3.7281	80	CTT/GAA	62.9	59.45	3.6592	81	CGC/GTG	62.9	61.27	3.6941
82	GGA/AGG	62.8	59.35	3.6575	83	ACC/GGG	62.8	62.23	3.7126	84	GGG/CCT	62.8	64.50	3.7559
85	CGG/GTC	62.7	63.05	3.7281	86	AGT/TCA	62.7	58.44	3.6399	87	GGC/TCG	62.7	63.77	3.7419
88	CGC/GAG	62.6	63.17	3.7304	89	CGG/GCG	62.6	64.68	3.7594	90	CGC/GGG	62.6	62.90	3.7253
91	CGG/GAC	62.6	62.72	3.7218	92	GGG/TCC	62.6	63.05	3.7281	93	GAG/CGC	62.5	64.15	3.7493
94	GGT/CGA	62.5	60.81	3.6852	95	GCC/TGG	62.5	61.27	3.6942	96	CGG/GCT	62.4	64.50	3.7559
97	CCG/GGT	62.4	63.37	3.7343	98	AAA/TTT	62.4	57.42	3.6205	99	GCG/TGC	62.4	62.10	3.7100
100	CGT/GCG	62.4	64.01	3.7466	101	GGG/CTC	62.3	63.03	3.7277	102	GCC/AGG	62.3	63.17	3.7304
103	AGG/GCC	62.2	62.72	3.7218	104	GCG/CAC	62.2	59.68	3.6637	105	CAG/GGC	62.2	62.72	3.7218
106	TCG/GGC	62.2	63.03	3.7277	107	TGT/ACA	62.1	58.44	3.6399	108	GGA/CCG	62.1	63.94	3.7451
109	GCG/CGG	62.0	62.82	3.7237	110	GGA/CAT	62.0	61.26	3.6939	111	TCC/GGG	61.9	62.12	3.7104
112	ATA/TAT	61.8	55.69	3.5875	113	CTG/GGC	61.7	63.05	3.7281	114	GGC/GCG	61.7	63.03	3.7279
115	TAC/AGG	61.7	59.30	3.6564	116	GGG/GCC	61.6	62.37	3.7152	117	AGC/GCG	61.6	63.41	3.7350
118	CGA/GCG	61.6	63.94	3.7451	119	TAA/ATT	61.6	55.42	3.5823	120	CCG/GGA	61.5	63.23	3.7316
121	GGT/CAA	61.4	61.22	3.6931	122	TGG/ACA	61.4	59.30	3.6564	123	GAG/CAC	61.4	60.02	3.6703
124	CCT/GGG	61.4	62.87	3.7247	125	GAT/CGA	61.3	59.63	3.6628	126	TAT/ATA	61.3	53.63	3.5481
127	TGG/ACG	61.3	58.84	3.6477	128	GTG/CTC	61.3	59.50	3.6602	129	AGC/TAG	61.3	59.69	3.6639
130	CCA/GGG	61.3	62.47	3.7170	131	GAA/AGT	61.3	58.97	3.6501	132	GGA/CGT	61.2	60.83	3.6857
133	ACA/GGT	61.2	58.21	3.6357	134	TGC/AGG	61.2	58.84	3.6477	135	TGG/TCC	61.2	61.57	3.6999

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(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
136	AGG/TCA	61.2	59.30	3.6564	137	GCA/CGA	61.2	63.09	3.7289	138	AAT/TTA	61.2	55.69	3.5875
139	CGG/GGC	61.2	62.37	3.7152	140	TGC/TCG	61.2	62.14	3.7108	141	CTC/GGG	61.2	62.12	3.7104
142	TTA/AAT	61.1	55.42	3.5823	143	GTC/TAG	61.1	60.50	3.6794	144	CTG/GTC	61.1	61.56	3.6997
145	GGG/ACC	61.1	62.72	3.7218	146	GGA/TCT	61.1	58.73	3.6456	147	TTT/AAA	61.0	55.42	3.5823
148	GAC/CCG	61.0	60.08	3.6714	149	GAT/CTG	61.0	61.61	3.7005	150	GCT/CGT	61.0	63.84	3.7433
151	CCG/GGG	60.9	62.21	3.7120	152	GAC/TTG	60.9	58.50	3.6412	153	ATC/GAG	60.8	59.67	3.6636
154	CAC/GAG	60.8	58.54	3.6420	155	AGC/ACG	60.8	60.75	3.6842	156	GTC/GAG	60.7	59.89	3.6677
157	GGA/CTT	60.7	60.65	3.6823	158	GAA/AGG	60.7	59.72	3.6644	159	ATT/TAA	60.7	55.69	3.5875
160	ACT/TGA	60.7	58.44	3.6399	161	GTA/AGG	60.7	58.04	3.6324	162	TCG/AGT	60.7	58.97	3.6502
163	GCA/GGT	60.7	58.88	3.6484	164	TTG/AGC	60.6	58.97	3.6502	165	TGA/GCT	60.6	58.73	3.6456
166	GGA/AAG	60.6	60.33	3.6761	167	GAG/CTG	60.6	61.12	3.6912	168	CGA/GTT	60.6	59.52	3.6606
169	GTC/CTG	60.5	56.19	3.5969	170	GTG/CAT	60.4	59.78	3.6657	171	GAG/CTA	60.4	61.44	3.6974
172	GAC/ATG	60.4	58.03	3.6321	173	GGA/ATG	60.4	58.07	3.6329	174	TGC/ATG	60.4	58.51	3.6413
175	CGT/GTA	60.3	59.00	3.6508	176	GGA/CCC	60.3	61.94	3.7070	177	GTA/CGT	60.3	60.17	3.6732
178	ATG/GAC	60.3	59.67	3.6636	179	GAG/CCC	60.3	60.78	3.6847	180	GCA/CGC	60.3	62.49	3.7174
181	GGA/CAG	60.3	62.55	3.7186	182	TGT/ACG	60.3	58.51	3.6413	183	CAT/GTG	60.3	60.84	3.6859
184	GCA/AGT	60.3	58.85	3.6479	185	GTG/TAC	60.2	60.50	3.6794	186	GGA/CCA	60.2	62.11	3.7101
187	GGT/CTA	60.2	60.14	3.6726	188	GAG/TTC	60.2	58.97	3.6502	189	AGG/TAC	60.2	59.67	3.6636
190	ACG/CGC	60.2	59.68	3.6637	191	CAC/GCG	60.2	58.18	3.6351	192	GCA/AGG	60.2	56.37	3.6004
193	AGC/TGG	60.2	60.85	3.6862	194	GGA/ACT	60.2	58.37	3.6387	195	GAA/CGT	60.2	60.09	3.6717
196	AGT/TCG	60.1	58.51	3.6413	197	ATC/TGG	60.1	60.20	3.6737	198	CGA/GCA	60.1	62.11	3.7101
199	CCG/AGC	60.1	60.78	3.6847	200	GCT/CGC	60.1	61.91	3.7064	201	TCA/GGT	60.1	58.10	3.6335
202	CGA/GCC	60.0	61.94	3.7070	203	GGT/CCT	60.0	61.32	3.6950	204	TGG/ATC	60.0	58.48	3.6407
205	TGC/CCG	60.0	59.85	3.6670	206	TTC/AGG	60.0	58.97	3.6501	207	TGG/ACT	60.0	58.97	3.6501
208	CCT/GGT	60.0	61.29	3.6945	209	GGC/CCA	60.0	60.95	3.6880	210	CGC/ACG	60.0	60.02	3.6703
211	TAG/GTC	60.0	58.48	3.6407	212	AAC/TGG	60.0	61.27	3.6941	213	CAG/GTG	60.0	60.39	3.6774
214	GAC/GTG	60.0	57.43	3.6206	215	GTC/CCG	59.9	58.09	3.6333	216	AGA/GCT	59.9	58.37	3.6387
217	CGT/GGA	59.9	58.36	3.6384	218	CAG/GTA	59.9	60.69	3.6831	219	GGT/CCC	59.9	60.85	3.6862
220	GAC/CAG	59.9	58.26	3.6366	221	GGA/ACG	59.9	55.92	3.5918	222	GGT/CGG	59.9	59.50	3.6602
223	TAC/GTG	59.9	58.03	3.6322	224	CGT/GCT	59.9	61.32	3.6950	225	GGA/GCT	59.9	58.36	3.6384
226	AGG/TCT	59.9	58.97	3.6501	227	GCA/TGT	59.9	57.25	3.6172	228	CAG/GAC	59.8	60.32	3.6759
229	TGC/AAG	59.8	58.44	3.6399	230	AGG/ACC	59.8	60.32	3.6759	231	CTC/GTG	59.8	58.00	3.6315
232	CCA/GGA	59.7	60.54	3.6802	233	GAG/ATC	59.7	58.84	3.6477	234	TCT/AGG	59.7	58.48	3.6407
235	ACG/AGC	59.7	60.02	3.6703	236	TAG/AGC	59.7	58.84	3.6477	237	GCC/CTG	59.7	58.10	3.6335
238	GGT/TCA	59.7	56.27	3.5985	239	TGA/ACG	59.7	58.44	3.6399	240	GTG/GAC	59.6	59.89	3.6677
241	TTG/GAC	59.6	58.86	3.6480	242	CCC/GAG	59.6	60.07	3.6711	243	CGA/GAT	59.6	59.39	3.6581
244	CGC/GCA	59.6	60.95	3.6880	245	GCT/GGA	59.6	56.90	3.6105	246	TCG/CGC	59.6	59.77	3.6654
247	AAG/GTC	59.6	58.42	3.6396	248	AGG/TCG	59.6	58.84	3.6477	249	TTG/TAC	59.5	58.65	3.6440
250	CTG/GAT	59.5	59.13	3.6532	251	GGT/ACA	59.5	55.92	3.5918	252	TCA/AGG	59.5	58.42	3.6396
253	GAG/AGT	59.5	58.13	3.6341	254	CAA/GGT	59.5	58.63	3.6436	255	TCG/AGA	59.5	58.84	3.6477
256	GCG/CTC	59.5	59.77	3.6654	257	GGG/CAA	59.4	59.56	3.6614	258	GTG/CCC	59.4	58.47	3.6406
259	GTA/AAG	59.4	54.98	3.5738	260	GTC/AAG	59.4	60.84	3.6859	261	CTT/GAG	59.4	59.13	3.6532
262	CCC/AGG	59.4	60.07	3.6711	263	TGG/AGC	59.3	58.20	3.6354	264	TGA/AAG	59.3	58.07	3.6329
265	GAG/AGG	59.3	58.49	3.6410	266	TCG/AGG	59.3	58.20	3.6354	267	AAC/GTG	59.3	57.66	3.6251
268	GAG/CTT	59.3	60.76	3.6843	269	GAA/AAG	59.3	57.99	3.6314	270	GCC/CAG	59.3	60.08	3.6714
271	GGC/AGG	59.3	59.79	3.6658	272	GCC/CGT	59.3	62.00	3.7081	273	CAG/GTT	59.3	60.06	3.6710
274	GAA/TTT	59.3	55.49	3.5836	275	TGA/TCT	59.2	57.54	3.6228	276	CAG/GCC	59.2	59.66	3.6633
277	TTC/GAG	59.2	58.86	3.6480	278	GCG/CCC	59.2	59.70	3.6640	279	ACC/CGG	59.2	58.18	3.6351
280	CTA/GGT	59.2	59.02	3.6512	281	GTA/CAA	59.1	58.75	3.6460	282	CGC/GCT	59.1	59.98	3.6695
283	CGT/GAA	59.1	59.35	3.6573	284	CCG/GTC	59.1	59.51	3.6605	285	AGC/CCG	59.1	60.02	3.6703
286	GCG/TGG	59.1	57.30	3.6183	287	CTG/GAA	59.0	59.10	3.6527	288	GAG/GTC	59.0	58.20	3.6354
289	GTG/CAA	59.0	59.76	3.6652	290	GCG/AAC	59.0	58.54	3.6418	291	TGG/AAC	59.0	58.42	3.6396

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(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
292	CCG/GAC	59.0	59.66	3.6633	293	CGG/ACC	59.0	59.66	3.6633	294	AGG/CCC	59.0	59.66	3.6633
295	ATG/TGC	59.0	60.50	3.6794	296	TCG/TGC	59.0	59.50	3.6602	297	CGA/GGT	59.0	58.38	3.6390
298	AGG/TTC	58.9	58.86	3.6480	299	GTT/CAG	58.9	59.78	3.6657	300	TCC/TGG	58.9	58.00	3.6315
301	CAT/GGA	58.9	58.14	3.6343	302	CGG/TCC	58.9	59.51	3.6605	303	CGC/CCG	58.9	59.53	3.6609
304	CGC/TCG	58.9	59.85	3.6670	305	GCC/CGA	58.9	61.84	3.7050	306	ACT/GGA	58.9	56.20	3.5972
307	CGT/GCC	58.9	60.85	3.6862	308	CCA/GGC	58.9	59.94	3.6688	309	AAC/GGG	58.9	57.36	3.6194
310	GAA/ATG	58.9	54.42	3.5631	311	GAA/CTG	58.9	61.29	3.6945	312	TTC/TAG	58.8	58.65	3.6440
313	CGC/GAA	58.8	58.87	3.6482	314	ACC/AGG	58.8	58.54	3.6420	315	CCC/GTG	58.8	56.94	3.6114
316	CTG/GCC	58.7	59.51	3.6605	317	AGC/TTG	58.7	58.54	3.6420	318	GCT/AGA	58.7	57.17	3.6157
319	TGG/CCC	58.7	59.51	3.6605	320	CCT/GGC	58.7	59.33	3.6571	321	TAG/TTC	58.7	57.36	3.6194
322	GGC/AAG	58.7	57.77	3.6273	323	CGT/GAG	58.7	59.57	3.6616	324	GGC/TAG	58.7	56.99	3.6122
325	GGC/CCT	58.7	59.98	3.6695	326	CTA/GTT	58.7	57.48	3.6217	327	TGA/ACA	58.6	56.73	3.6074
328	CGG/GAG	58.6	59.94	3.6687	329	TTG/ATC	58.6	57.35	3.6193	330	GGA/CAA	58.6	58.99	3.6506
331	TGT/GCA	58.6	56.27	3.5985	332	GAG/AAC	58.6	58.85	3.6479	333	GTG/AAC	58.6	60.84	3.6859
334	CGG/CCC	58.6	59.25	3.6554	335	GTG/AGC	58.6	57.97	3.6311	336	AGA/TCG	58.6	58.44	3.6399
337	TAC/TTG	58.6	56.57	3.6043	338	GAA/CAT	58.6	58.32	3.6377	339	GTT/CAT	58.6	58.63	3.6436
340	GTA/TAT	58.6	54.98	3.5738	341	GAT/AGA	58.5	58.77	3.6462	342	CTG/GAG	58.5	57.97	3.6310
343	TCC/CGG	58.5	59.15	3.6536	344	CCC/GGT	58.5	59.42	3.6588	345	GGT/GCA	58.5	55.55	3.5848
346	CCG/CGC	58.5	59.70	3.6640	347	CTA/GAG	58.5	59.10	3.6527	348	CAA/GTG	58.5	60.55	3.6804
349	GAT/CTT	58.5	60.80	3.6851	350	TCT/GGA	58.4	56.09	3.5951	351	GTC/AGG	58.4	58.08	3.6332
352	CAT/GTT	58.4	59.35	3.6575	353	GAC/GGG	58.4	57.25	3.6173	354	AAG/CGC	58.4	58.54	3.6418
355	GAA/ACG	58.4	56.70	3.6067	356	GGA/CGG	58.4	60.11	3.6719	357	AAT/TTG	58.4	56.80	3.6086
358	TGA/GAG	58.4	58.00	3.6315	359	TGG/GTC	58.3	57.56	3.6233	360	AGG/TGC	58.3	59.89	3.6677
361	GTA/CTT	58.3	57.55	3.6230	362	GGC/CCC	58.3	59.61	3.6624	363	TAC/AAG	58.3	56.73	3.6074
364	TGC/GTG	58.3	57.28	3.6179	365	AGT/GCA	58.3	55.92	3.5918	366	GTT/CGA	58.3	58.46	3.6405
367	TTG/CAC	58.3	56.39	3.6008	368	GCC/CGC	58.3	60.83	3.6858	369	ATG/TTC	58.3	58.65	3.6440
370	GAC/AAG	58.3	57.56	3.6231	371	CTC/GCG	58.3	59.14	3.6535	372	TGC/ACA	58.2	55.67	3.5871
373	GAT/CAA	58.2	57.51	3.6223	374	GCT/TGA	58.2	55.21	3.5783	375	CGC/GCC	58.2	59.61	3.6624
376	AAC/TAG	58.2	57.60	3.6240	377	TAC/ACG	58.1	55.67	3.5871	378	GTA/ATG	58.1	54.86	3.5716
379	CGG/GAA	58.1	59.85	3.6670	380	GGG/AGC	58.1	59.80	3.6661	381	ATT/TAG	58.1	55.37	3.5813
382	TCT/AGT	58.0	57.35	3.6193	383	CGA/GAA	58.0	59.31	3.6566	384	GTA/CAG	58.0	59.76	3.6652
385	GCA/CAT	58.0	57.19	3.6161	386	GGG/CAT	58.0	58.89	3.6487	387	CTT/GAT	58.0	57.96	3.6308
388	ACG/TGT	58.0	58.50	3.6412	389	GTC/CAA	58.0	57.90	3.6296	390	GTA/CAC	58.0	57.90	3.6296
391	GTA/GAT	58.0	54.35	3.5619	392	GTG/CGT	58.0	58.79	3.6466	393	TAA/GTT	57.9	55.01	3.5744
394	AGA/TAT	57.9	56.65	3.6058	395	AGA/ACT	57.9	56.29	3.5989	396	CTT/GTA	57.9	57.07	3.6139
397	GAT/TTA	57.9	53.70	3.5494	398	AAG/AGC	57.9	58.85	3.6479	399	AAG/ATC	57.9	56.69	3.6065
400	GCA/AAG	57.9	56.41	3.6013	401	AGA/TAG	57.9	59.47	3.6596	402	GCA/ACG	57.9	55.23	3.5786
403	GAA/CCT	57.9	58.16	3.6347	404	GAA/ATT	57.9	55.36	3.5812	405	GGG/CTG	57.8	60.09	3.6715
406	AAC/ATG	57.8	55.90	3.5914	407	AAC/CTG	57.8	55.35	3.5809	408	CAA/GAT	57.8	56.75	3.6078
409	GCT/CAA	57.8	57.13	3.6150	410	AGA/TCA	57.8	56.73	3.6074	411	TGT/TCA	57.8	54.71	3.5688
412	CCG/GCC	57.8	59.25	3.6554	413	GGG/ATC	57.8	59.82	3.6665	414	GTG/CAG	57.8	58.63	3.6436
415	GTA/ACG	57.8	56.01	3.5936	416	AAG/TTG	57.8	56.36	3.6003	417	GTA/CCT	57.7	57.10	3.6144
418	TGA/ATT	57.7	55.11	3.5763	419	TTG/AAA	57.7	55.09	3.5759	420	CTT/GGA	57.7	57.28	3.6179
421	GTC/GGG	57.7	58.66	3.6443	422	ATA/GAT	57.7	54.14	3.5578	423	TGA/ACC	57.6	56.59	3.6046
424	AAC/AGG	57.6	57.47	3.6215	425	TAG/ATA	57.6	54.63	3.5672	426	GGG/AAC	57.6	58.73	3.6456
427	ATC/AAG	57.6	57.54	3.6228	428	GGG/CAG	57.6	58.44	3.6401	429	GGC/GGG	57.6	56.71	3.6069
430	TAC/GGG	57.6	57.71	3.6260	431	GGC/TTG	57.6	56.70	3.6068	432	CCA/AGT	57.6	56.04	3.5942
433	GGG/CGT	57.6	58.93	3.6494	434	AAA/GTT	57.6	54.61	3.5668	435	CAC/GTT	57.6	58.23	3.6359
436	CCC/GGA	57.5	59.25	3.6554	437	GAT/ATA	57.5	53.57	3.5468	438	GTT/CGG	57.5	58.36	3.6384
439	GAG/AGA	57.5	58.01	3.6318	440	TAG/AAC	57.5	56.69	3.6065	441	GTG/GGC	57.5	57.24	3.6170
442	GCC/CCG	57.5	58.66	3.6443	443	GGG/CGG	57.5	58.21	3.6355	444	GCA/ATG	57.5	56.06	3.5946
445	ATC/TTG	57.5	57.65	3.6249	446	TGT/ACT	57.5	56.01	3.5936	447	GCA/CTT	57.5	56.25	3.5982

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
448	TGA/AAT	57.5	55.09	3.5759	449	CAA/GCT	57.5	56.17	3.5965	450	GTC/CAT	57.4	57.41	3.6204
451	GAT/CCA	57.4	56.56	3.6040	452	AGA/TCC	57.4	56.59	3.6046	453	TCC/AAG	57.4	56.59	3.6046
454	GGC/ATG	57.4	58.44	3.6399	455	GTT/TAA	57.4	54.98	3.5738	456	AGT/ACA	57.4	53.40	3.5437
457	TCA/AGA	57.4	56.68	3.6064	458	GGG/CGA	57.4	58.53	3.6417	459	GAA/CTA	57.4	60.54	3.6802
460	TAT/GTA	57.4	53.21	3.5399	461	AAG/TGC	57.4	60.84	3.6859	462	GAT/AGG	57.4	57.85	3.6286
463	GAA/CGG	57.4	57.90	3.6296	464	GAT/CGG	57.4	58.13	3.6341	465	CAC/TTG	57.4	54.91	3.5725
466	GAC/CTT	57.4	59.70	3.6642	467	TTA/AAG	57.4	55.09	3.5759	468	GAC/TGG	57.3	55.93	3.5919
469	CTA/GAA	57.3	58.09	3.6333	470	GGG/TTC	57.3	56.99	3.6122	471	CAA/GAG	57.3	57.32	3.6186
472	GGA/GAG	57.3	57.19	3.6161	473	CCC/CGG	57.3	58.20	3.6354	474	ATG/TAT	57.3	55.37	3.5813
475	GGG/TCT	57.3	56.80	3.6087	476	GAA/GTT	57.3	54.38	3.5624	477	AAG/TTT	57.3	56.03	3.5939
478	GAG/GGC	57.3	59.80	3.6661	479	TTT/AAG	57.3	55.11	3.5763	480	CGG/GTG	57.3	57.12	3.6147
481	ACA/CGT	57.3	54.19	3.5588	482	GAT/AGT	57.2	57.35	3.6191	483	CGA/GTG	57.2	56.87	3.6100
484	TAT/AGA	57.2	54.63	3.5672	485	CGG/GTA	57.2	57.92	3.6302	486	TCG/AAC	57.2	56.15	3.5963
487	ATG/TCC	57.2	56.58	3.6044	488	CCC/GGC	57.2	59.20	3.6546	489	GTG/ATC	57.2	56.84	3.6094
490	AAG/CTC	57.2	56.15	3.5963	491	GAT/CTC	57.2	59.72	3.6644	492	GGG/ACG	57.2	56.65	3.6057
493	CCC/GCG	57.2	58.20	3.6354	494	GTA/CGG	57.2	58.74	3.6457	495	TAC/CTG	57.2	54.83	3.5710
496	CCA/GTT	57.2	55.69	3.5873	497	TTG/AAT	57.2	55.11	3.5763	498	TAA/AGT	57.2	55.09	3.5759
499	TGA/CCT	57.1	55.49	3.5836	500	CGT/GAC	57.1	57.68	3.6255	501	AGG/GTC	57.1	56.88	3.6101
502	TAT/ATG	57.1	54.79	3.5702	503	CGT/GAT	57.1	58.79	3.6468	504	CTG/GGT	57.1	57.60	3.6240
505	AAG/TTA	57.1	56.65	3.6058	506	TTG/ACC	57.1	55.71	3.5879	507	CCG/TGC	57.1	58.47	3.6406
508	GAA/CTC	57.1	59.77	3.6655	509	GGG/GTC	57.1	57.71	3.6260	510	GCC/AAG	57.1	57.43	3.6206
511	GGC/GAG	57.1	56.00	3.5933	512	CAA/GCG	57.1	56.95	3.6115	513	CGT/GGG	57.1	57.95	3.6307
514	CAC/ATG	57.1	54.76	3.5696	515	GGT/CTG	57.1	56.39	3.6008	516	GCG/GGT	57.1	56.96	3.6117
517	GGG/CTT	57.1	59.31	3.6566	518	CAT/GTC	57.1	58.23	3.6361	519	CGG/GAT	57.0	59.92	3.6684
520	CGG/GTT	57.0	57.91	3.6299	521	TGT/ATA	57.0	54.79	3.5702	522	TGC/ACT	57.0	54.81	3.5706
523	TCA/AGC	57.0	56.14	3.5961	524	TTC/ATG	57.0	56.01	3.5936	525	AGT/TAA	57.0	56.07	3.5947
526	AAG/TAC	57.0	57.54	3.6228	527	GGG/TAC	57.0	57.32	3.6186	528	AAG/GGC	57.0	58.73	3.6456
529	ATG/GGC	57.0	57.32	3.6186	530	TAG/GGC	57.0	59.82	3.6665	531	CAG/TTC	57.0	55.71	3.5879
532	GTG/CGG	57.0	57.15	3.6154	533	GGA/CTG	57.0	58.48	3.6407	534	CTA/GCT	57.0	55.60	3.5857
535	GTC/CAC	57.0	56.78	3.6083	536	TGC/GGG	57.0	57.77	3.6273	537	CGA/ACT	57.0	55.64	3.5865
538	AGT/TCT	57.0	56.01	3.5936	539	AGA/TTT	57.0	56.03	3.5939	540	CAT/GAA	56.9	55.92	3.5918
541	CGA/TCT	56.9	55.49	3.5836	542	CGT/TCA	56.9	52.57	3.5278	543	GGG/TCA	56.9	57.41	3.6204
544	GAC/CTA	56.9	59.46	3.6595	545	CAA/GTA	56.9	59.09	3.6524	546	CTG/TAC	56.9	56.58	3.6044
547	TCG/ATC	56.9	55.63	3.5864	548	AAC/TCG	56.9	57.22	3.6168	549	GGG/TCG	56.9	56.99	3.6122
550	AAC/CGG	56.9	56.54	3.6038	551	AGC/GGG	56.9	56.63	3.6054	552	GTA/AAT	56.9	55.33	3.5805
553	CCA/GAT	56.9	55.52	3.5841	554	ACA/AGT	56.9	54.54	3.5654	555	GGT/AAA	56.9	54.64	3.5674
556	TGG/GCA	56.9	57.41	3.6204	557	TTC/ACG	56.9	54.81	3.5706	558	TTA/AGT	56.9	55.11	3.5763
559	GGC/CAA	56.8	57.87	3.6291	560	TAG/ATG	56.8	54.32	3.5613	561	GGC/GTG	56.8	56.34	3.5999
562	GAG/CAA	56.8	56.83	3.6093	563	GTT/CAC	56.8	57.41	3.6204	564	TTG/GGC	56.8	56.99	3.6123
565	TAG/CTC	56.8	55.63	3.5864	566	ATA/TAG	56.8	55.35	3.5809	567	ATG/TAG	56.8	54.24	3.5598
568	GGT/ACG	56.8	55.99	3.5932	569	CGA/GGG	56.8	58.67	3.6445	570	GCG/AGT	56.8	57.23	3.6169
571	TAA/TTT	56.8	53.50	3.5456	572	CAG/ATC	56.8	55.57	3.5851	573	TGC/GAG	56.8	56.53	3.6035
574	TGG/GCG	56.8	56.99	3.6122	575	CTC/TAG	56.7	56.58	3.6044	576	ATT/GAA	56.7	54.14	3.5578
577	GAG/CGA	56.7	57.29	3.6180	578	GGG/CTA	56.7	59.48	3.6599	579	GAG/TAC	56.7	56.86	3.6097
580	GAC/TAG	56.7	55.72	3.5880	581	CAT/GGG	56.7	57.01	3.6126	582	GCT/GGG	56.7	56.49	3.6026
583	ACA/TGG	56.7	57.65	3.6249	584	CCC/TGG	56.7	56.94	3.6114	585	TCA/TGT	56.7	54.00	3.5551
586	GGA/CAC	56.7	57.27	3.6176	587	GGT/CAC	56.7	56.30	3.5992	588	TGG/GAC	56.7	56.88	3.6101
589	TGG/GCT	56.7	56.80	3.6087	590	TGA/AGT	56.6	53.98	3.5547	591	TAG/ATT	56.6	53.99	3.5549
592	GTG/CGA	56.6	57.41	3.6202	593	CTG/AAC	56.6	57.09	3.6143	594	AGG/GAC	56.6	56.43	3.6015
595	CAA/GTC	56.6	58.29	3.6372	596	GGT/CAG	56.6	58.52	3.6416	597	GCA/CCG	56.6	55.71	3.5878
598	GGT/AGG	56.6	56.19	3.5969	599	CAA/GGG	56.6	57.37	3.6195	600	TCA/CGT	56.6	55.14	3.5769
601	CAG/GGT	56.6	56.48	3.6025	602	ACT/TGG	56.6	58.03	3.6322	603	GTA/AGT	56.6	55.55	3.5847

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
604	TGG/GGC	56.6	57.71	3.6260	605	TGG/TTC	56.6	56.17	3.5967	606	TTG/AAG	56.6	53.97	3.5546
607	AGA/CCT	56.5	55.64	3.5865	608	GAT/GTA	56.5	52.54	3.5272	609	ATC/GGG	56.5	57.42	3.6205
610	GTC/ATG	56.5	56.48	3.6025	611	GTT/GAA	56.5	54.35	3.5619	612	GGG/ACA	56.5	57.08	3.6140
613	CTG/GGA	56.5	57.35	3.6191	614	GTT/CTA	56.5	57.14	3.6151	615	ATG/AAC	56.5	57.54	3.6228
616	ATG/CAC	56.5	56.17	3.5967	617	GAG/ACC	56.5	58.24	3.6362	618	AAG/TCC	56.5	57.09	3.6143
619	CGA/GGC	56.5	56.59	3.6047	620	ACC/TAG	56.5	57.13	3.6150	621	GCA/GGG	56.5	56.09	3.5951
622	GCA/AAT	56.5	54.85	3.5714	623	TTA/TAT	56.5	53.10	3.5379	624	TCC/AGT	56.5	55.71	3.5878
625	GAG/CGG	56.4	57.77	3.6271	626	AAA/TTG	56.4	56.51	3.6032	627	GGT/ATA	56.4	55.31	3.5802
628	GTC/ACG	56.4	55.70	3.5876	629	CTG/GGG	56.4	57.12	3.6147	630	CAC/CTG	56.4	53.87	3.5526
631	TTA/GAT	56.4	53.31	3.5419	632	GGG/ACT	56.4	56.46	3.6022	633	ACG/GGT	56.4	56.27	3.5985
634	CTT/GAC	56.4	56.73	3.6074	635	TGC/TTG	56.4	55.20	3.5780	636	GGC/AGA	56.4	55.02	3.5746
637	GAC/ACG	56.3	56.28	3.5988	638	GAC/AGA	56.3	56.18	3.5968	639	CTA/GAC	56.3	57.22	3.6166
640	AAC/GAG	56.3	54.08	3.5565	641	GCA/GCG	56.3	54.76	3.5697	642	CAG/GGG	56.3	56.95	3.6115
643	TTC/GGG	56.3	56.93	3.6111	644	TCC/ATG	56.3	55.59	3.5855	645	CTC/GAT	56.3	56.73	3.6074
646	GCA/CCT	56.3	55.91	3.5917	647	TGG/TCA	56.3	55.90	3.5914	648	AGT/TCC	56.3	55.59	3.5855
649	TCT/AGC	56.3	55.63	3.5862	650	CTC/AAG	56.3	57.09	3.6143	651	CAT/GAG	56.2	56.14	3.5961
652	GAG/CCT	56.2	57.27	3.6176	653	AGG/GCT	56.2	56.46	3.6022	654	GGA/AGT	56.2	55.90	3.5915
655	GAT/AAA	56.2	55.06	3.5755	656	TTA/AAA	56.2	54.10	3.5570	657	CTC/GAA	56.2	57.22	3.6166
658	CGT/ACA	56.2	52.72	3.5307	659	GAA/AGA	56.2	56.12	3.5956	660	TCC/AGA	56.2	55.56	3.5850
661	CAC/GTA	56.2	57.97	3.6311	662	GGG/GAC	56.2	56.65	3.6057	663	TAG/GAC	56.2	56.62	3.6053
664	TGG/TAC	56.2	55.95	3.5924	665	CAG/AGC	56.2	58.24	3.6362	666	GGG/TGC	56.2	57.24	3.6170
667	GCC/ACG	56.2	55.65	3.5866	668	CCA/GTG	56.2	55.00	3.5742	669	CAG/GAT	56.2	56.33	3.5997
670	ATA/TGT	56.2	56.80	3.6087	671	CAG/GCT	56.2	56.51	3.6031	672	GTA/CGA	56.1	56.79	3.6085
673	CGG/GGT	56.1	57.37	3.6195	674	AGG/GCA	56.1	57.08	3.6140	675	CTT/GCA	56.1	54.72	3.5689
676	TGG/CAC	56.1	54.31	3.5610	677	TAG/ACC	56.1	55.56	3.5850	678	ATG/AGC	56.1	56.86	3.6097
679	CGT/GGC	56.1	56.26	3.5983	680	GGG/GGC	56.1	56.86	3.6097	681	ATG/GTC	56.1	55.95	3.5924
682	TTG/GTC	56.1	56.17	3.5967	683	GAT/AAG	56.1	55.23	3.5787	684	CCA/GAG	56.1	56.92	3.6110
685	GGA/TAG	56.1	56.30	3.5992	686	GGT/TCG	56.1	56.33	3.5997	687	CAC/AGG	56.1	56.22	3.5976
688	GCT/AGG	56.1	56.75	3.6078	689	CTT/GGG	56.1	57.16	3.6155	690	GCA/CTG	56.1	55.39	3.5816
691	GGT/CAT	56.1	56.40	3.6010	692	ATA/TTT	56.1	55.34	3.5806	693	GGT/AGA	56.0	54.71	3.5686
694	CGG/AGC	56.0	56.69	3.6065	695	AGG/ATC	56.0	56.62	3.6053	696	GGC/AAA	56.0	55.05	3.5752
697	GTC/AGA	56.0	54.90	3.5723	698	GTT/AAA	56.0	55.33	3.5805	699	ATG/TAA	56.0	55.35	3.5809
700	GAG/CCA	56.0	56.72	3.6071	701	GCT/CTA	56.0	55.49	3.5836	702	TAT/TTA	56.0	51.62	3.5096
703	AGA/GAG	56.0	56.47	3.6024	704	GAA/CCG	56.0	57.32	3.6186	705	GCG/AGG	56.0	56.14	3.5960
706	CGG/GGG	56.0	56.85	3.6096	707	CTA/GGG	56.0	58.66	3.6443	708	CGA/CCT	56.0	55.23	3.5787
709	AGG/GGC	56.0	56.65	3.6057	710	GTA/CTG	56.0	56.96	3.6117	711	GGC/CGA	55.9	56.12	3.5956
712	GGC/CGT	55.9	56.06	3.5944	713	TGT/AGA	55.9	54.32	3.5613	714	CGG/GGA	55.9	57.04	3.6133
715	AGT/TTA	55.9	55.71	3.5879	716	AGG/CAC	55.9	53.94	3.5540	717	GAA/AGC	55.9	55.96	3.5925
718	GAG/TGC	55.9	57.97	3.6311	719	GCG/CCG	55.9	55.68	3.5872	720	AGA/CGG	55.9	54.33	3.5615
721	GTG/CTT	55.9	57.84	3.6285	722	TGC/ACC	55.9	54.49	3.5646	723	CAG/CTC	55.9	54.68	3.5682
724	GAG/CGT	55.9	57.62	3.6244	725	TAC/GAG	55.8	55.48	3.5834	726	ATC/TCG	55.8	56.18	3.5968
727	TTC/AAA	55.8	53.25	3.5408	728	GCG/AGA	55.8	57.10	3.6144	729	CAG/GGA	55.8	56.76	3.6079
730	GCG/GGA	55.8	56.83	3.6093	731	CCT/GTA	55.8	54.92	3.5727	732	CTG/GTA	55.8	55.88	3.5911
733	CGA/GTC	55.8	56.30	3.5990	734	GCG/ACG	55.8	53.76	3.5505	735	ACG/TGG	55.8	57.42	3.6205
736	CTA/GTG	55.8	55.79	3.5893	737	GGA/AAT	55.8	55.82	3.5900	738	CCA/GCT	55.8	54.55	3.5655
739	AAT/TTT	55.8	55.34	3.5806	740	AGA/TGT	55.8	56.36	3.6003	741	TAA/AAT	55.8	54.10	3.5570
742	GGA/CTA	55.7	56.71	3.6069	743	CGT/GTG	55.7	54.90	3.5724	744	GTT/CGT	55.7	56.62	3.6053
745	TGC/AAA	55.7	52.94	3.5348	746	AGT/CCA	55.7	52.72	3.5307	747	AGC/TCA	55.7	55.67	3.5871
748	CGA/GTA	55.7	56.87	3.6100	749	GGA/GCC	55.7	53.63	3.5480	750	GTG/GCC	55.7	54.01	3.5553
751	ATG/ATC	55.7	56.09	3.5950	752	GTG/GTC	55.7	53.74	3.5501	753	ACG/TTC	55.7	56.39	3.6008
754	CCG/GAG	55.7	56.31	3.5993	755	TGT/GCG	55.7	56.33	3.5997	756	TAA/ATG	55.7	54.49	3.5644
757	ATA/TCT	55.7	54.24	3.5598	758	TCG/GGT	55.7	56.15	3.5963	759	GAG/GCC	55.7	56.69	3.6065

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
760	AGG/CTC	55.7	55.79	3.5894	761	TAT/AAA	55.6	52.98	3.5357	762	CCT/GAA	55.6	55.46	3.5830
763	GTT/CCA	55.6	56.25	3.5982	764	GGG/GCA	55.6	56.72	3.6072	765	AAT/GTA	55.6	52.80	3.5321
766	GAG/GAC	55.6	55.79	3.5894	767	TAG/TAC	55.6	56.09	3.5950	768	GCG/ACC	55.6	56.88	3.6101
769	TCG/ACC	55.6	54.68	3.5682	770	GTG/TCC	55.6	54.31	3.5610	771	GTG/TTC	55.6	54.13	3.5577
772	AGC/GAG	55.6	55.51	3.5840	773	AGA/AGG	55.6	55.47	3.5832	774	GCG/GGG	55.6	55.86	3.5907
775	GAA/AAT	55.6	55.28	3.5797	776	CAT/GAT	55.6	55.87	3.5910	777	CAT/GGT	55.6	55.78	3.5892
778	GCG/TGT	55.6	55.28	3.5795	779	GTA/CTA	55.6	56.12	3.5956	780	GAG/TCC	55.6	56.87	3.6100
781	TCT/GGG	55.6	55.67	3.5871	782	CTG/GTT	55.6	56.30	3.5990	783	CCT/AGA	55.6	53.97	3.5546
784	TGC/TAG	55.6	55.20	3.5780	785	TGG/TCT	55.6	55.28	3.5795	786	GGA/AAA	55.5	55.49	3.5836
787	GGA/AGA	55.5	54.85	3.5714	788	GGA/CGA	55.5	56.49	3.6026	789	CCA/AGG	55.5	53.14	3.5386
790	TGA/GTT	55.5	53.61	3.5477	791	ATC/AGG	55.5	55.30	3.5799	792	AGC/GTG	55.5	55.52	3.5841
793	AAA/ATT	55.5	52.79	3.5320	794	TGA/AAA	55.5	53.76	3.5505	795	TGT/AAA	55.5	54.49	3.5644
796	AGG/AAC	55.5	55.34	3.5808	797	CTG/CAC	55.5	55.29	3.5798	798	CGC/GAC	55.5	56.86	3.6097
799	GCG/GAC	55.5	55.74	3.5883	800	GTG/ACC	55.5	56.22	3.5975	801	TGT/ACC	55.5	55.59	3.5855
802	GGA/CGC	55.5	57.43	3.6208	803	GCG/ATC	55.5	56.76	3.6079	804	GCG/CTG	55.5	55.91	3.5917
805	GGG/GCT	55.5	56.12	3.5956	806	TTA/ACT	55.5	52.78	3.5317	807	TTA/ATT	55.5	53.97	3.5546
808	ATT/TAT	55.4	54.24	3.5598	809	GAG/AAG	55.4	55.45	3.5829	810	GAG/CCG	55.4	56.46	3.6022
811	GTG/CCT	55.4	55.14	3.5769	812	AAA/CTT	55.4	52.21	3.5209	813	GAA/CGA	55.4	56.28	3.5986
814	GAC/CGA	55.4	54.45	3.5637	815	CTA/GGA	55.4	56.51	3.6032	816	TCG/GGA	55.4	56.02	3.5937
817	ACG/TGA	55.4	58.03	3.6321	818	CGA/GAC	55.4	58.31	3.6374	819	TCG/GAC	55.4	55.79	3.5894
820	GCG/TAC	55.4	55.17	3.5774	821	TAG/GCC	55.4	56.03	3.5939	822	CAG/CGC	55.4	56.88	3.6101
823	CGC/GGC	55.4	55.14	3.5769	824	GAC/CTC	55.4	58.13	3.6341	825	CAG/GAG	55.4	55.22	3.5784
826	CCT/GAG	55.4	55.71	3.5878	827	GGG/GCG	55.4	56.29	3.5989	828	GGA/TAT	55.4	53.90	3.5532
829	CCA/CGT	55.4	54.21	3.5591	830	GGT/CGT	55.4	56.89	3.6104	831	TAA/ATA	55.4	52.98	3.5357
832	GGC/CAC	55.4	55.67	3.5871	833	CGG/CGC	55.4	55.53	3.5844	834	GAG/CAT	55.4	56.62	3.6053
835	AGG/AGC	55.3	55.79	3.5894	836	TCC/ACG	55.3	54.49	3.5646	837	TAT/ATT	55.3	53.26	3.5411
838	TTT/GAA	55.3	53.31	3.5419	839	TGA/GCG	55.3	56.26	3.5983	840	TGG/AAA	55.3	53.38	3.5432
841	ATA/TAA	55.3	54.36	3.5620	842	GTG/CCA	55.3	55.93	3.5919	843	CAT/GCA	55.3	54.49	3.5646
844	CTA/GTA	55.3	56.41	3.6013	845	ACG/TAC	55.3	56.17	3.5967	846	CGA/AGC	55.3	53.08	3.5375
847	TAG/CGC	55.3	56.76	3.6079	848	GGA/CTC	55.3	56.38	3.6006	849	CGT/GTC	55.3	55.26	3.5791
850	TTG/TTC	55.3	55.48	3.5834	851	GGT/AAG	55.3	54.97	3.5737	852	GAC/GAG	55.3	54.69	3.5683
853	GCG/GCG	55.3	55.17	3.5774	854	ATC/ATG	55.3	54.41	3.5629	855	GGG/AGT	55.3	55.63	3.5862
856	GGT/AGT	55.3	54.35	3.5619	857	GAC/CGT	55.3	55.50	3.5837	858	TAA/CTT	55.3	51.66	3.5103
859	TCT/CGA	55.3	53.04	3.5367	860	CTG/AGC	55.3	56.87	3.6100	861	TGG/CTC	55.3	55.17	3.5776
862	TAC/TAG	55.3	55.04	3.5751	863	AGG/GCG	55.3	56.65	3.6057	864	AGT/GCG	55.3	55.98	3.5931
865	TGA/AGG	55.3	54.22	3.5594	866	TGC/CGG	55.3	54.88	3.5720	867	CGC/GAT	55.3	57.45	3.6211
868	GTA/ATT	55.3	54.79	3.5702	869	TTT/AGA	55.2	53.99	3.5549	870	TCC/AGC	55.2	54.68	3.5682
871	ATC/CAG	55.2	56.17	3.5967	872	TGA/TAG	55.2	55.22	3.5784	873	GTG/CTG	55.2	55.20	3.5781
874	CCT/GTG	55.2	53.21	3.5399	875	CGT/GTT	55.2	55.90	3.5914	876	GAC/AAA	55.2	53.61	3.5477
877	CAG/GAA	55.2	56.66	3.6060	878	AGG/TAA	55.2	54.93	3.5728	879	TGT/CCA	55.2	52.57	3.5278
880	AAG/GAC	55.2	55.34	3.5808	881	GGA/TCC	55.2	54.35	3.5619	882	GGC/CGC	55.2	57.18	3.6159
883	GGT/CGC	55.2	56.72	3.6071	884	CAC/GTC	55.2	56.60	3.6049	885	TAA/ACG	55.2	52.94	3.5348
886	GGG/AGG	55.2	54.78	3.5700	887	ACA/GGG	55.2	55.39	3.5818	888	GGA/TTT	55.2	53.90	3.5532
889	TGG/ATG	55.2	54.06	3.5563	890	TTT/AAT	55.2	53.97	3.5546	891	TTC/CAG	55.1	56.39	3.6008
892	GTC/AAA	55.1	53.14	3.5386	893	GTC/CGA	55.1	56.09	3.5950	894	GGT/ACC	55.1	52.96	3.5353
895	AGG/CGC	55.1	55.74	3.5883	896	AAA/TAT	55.1	55.07	3.5756	897	CGC/AGG	55.1	56.06	3.5944
898	GAA/AAA	55.1	54.71	3.5686	899	TTT/TAA	55.1	53.10	3.5379	900	AGT/TGA	55.1	56.70	3.6067
901	CGG/CAC	55.1	52.32	3.5229	902	GGA/ACC	55.1	54.00	3.5551	903	GGT/GCG	55.1	55.63	3.5862
904	CCG/AGG	55.1	52.88	3.5337	905	GCC/ATG	55.1	56.09	3.5951	906	ATA/AAT	55.1	51.98	3.5164
907	GAC/AGT	55.1	55.26	3.5793	908	GGA/ATT	55.1	55.90	3.5914	909	CAA/TTT	55.1	51.74	3.5120
910	TGG/AAG	55.1	54.22	3.5594	911	GGA/ATA	55.0	54.08	3.5565	912	GGT/TTA	55.0	52.98	3.5355
913	AGA/AAG	55.0	54.90	3.5723	914	AGG/TAG	55.0	55.55	3.5848	915	AGT/TAG	55.0	54.28	3.5605

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
916	CTC/AGG	55.0	55.54	3.5846	917	TCA/GGG	55.0	55.28	3.5795	918	ACC/TTG	55.0	56.86	3.6097
919	GTC/TTG	55.0	54.16	3.5581	920	GTA/GGT	55.0	53.96	3.5543	921	CGG/ATC	55.0	56.03	3.5939
922	AGA/CTG	55.0	54.03	3.5557	923	AGG/ACG	55.0	54.16	3.5582	924	AGG/ACA	55.0	54.61	3.5668
925	CGT/CCA	55.0	52.29	3.5224	926	CTC/GAC	55.0	56.10	3.5953	927	GCG/GCC	55.0	55.53	3.5844
928	GTA/CGC	55.0	55.52	3.5841	929	GAA/CAG	55.0	57.50	3.6220	930	TGT/AGG	55.0	54.06	3.5563
931	AGC/CGG	55.0	55.09	3.5760	932	ATC/GTG	55.0	55.61	3.5859	933	GCG/AAT	55.0	54.06	3.5563
934	ATC/TAT	55.0	53.06	3.5371	935	CAC/GGT	55.0	54.37	3.5622	936	CTT/GGT	55.0	56.15	3.5963
937	AAC/TTT	55.0	54.23	3.5595	938	TTA/AAC	55.0	53.25	3.5408	939	GTA/AAA	55.0	53.99	3.5549
940	TCC/GAG	55.0	55.09	3.5759	941	GTT/CTG	55.0	54.93	3.5728	942	AGC/TCT	55.0	54.81	3.5706
943	GAT/CGT	54.9	56.49	3.6026	944	GGA/ACA	54.9	54.15	3.5580	945	ACG/GGA	54.9	56.14	3.5960
946	AAT/ATA	54.9	50.87	3.4953	947	TAT/CTA	54.9	49.69	3.4726	948	AAG/GCC	54.9	54.34	3.5616
949	GGT/GCC	54.9	52.58	3.5279	950	TGT/AAG	54.9	53.74	3.5502	951	GCC/TAG	54.9	54.45	3.5637
952	GCT/ACG	54.9	51.75	3.5121	953	GTA/CCG	54.9	55.90	3.5914	954	ACG/GGG	54.9	55.16	3.5773
955	GTC/TGG	54.9	53.96	3.5543	956	CTG/GTG	54.9	53.03	3.5365	957	GCG/CAT	54.9	54.93	3.5730
958	TAA/ACT	54.9	53.25	3.5408	959	GCG/CCT	54.9	54.96	3.5735	960	CCG/GCT	54.9	55.68	3.5872
961	TAC/ATA	54.9	51.83	3.5137	962	CGC/CGG	54.9	55.99	3.5932	963	GAT/ATG	54.9	54.71	3.5688
964	TGA/GAT	54.9	53.36	3.5429	965	GTT/AAG	54.8	55.00	3.5742	966	GTT/AGG	54.8	54.22	3.5594
967	CCG/GTG	54.8	54.39	3.5626	968	GTC/GTG	54.8	54.24	3.5598	969	TTC/GTG	54.8	56.21	3.5974
970	GCT/AAA	54.8	54.33	3.5615	971	GCT/CCA	54.8	54.26	3.5601	972	ACT/CGA	54.8	52.04	3.5177
973	TTT/ATA	54.8	53.26	3.5411	974	CGG/AAC	54.8	54.35	3.5617	975	CGG/TAC	54.8	54.16	3.5581
976	CGT/AGC	54.8	52.41	3.5246	977	GAC/AGC	54.8	54.96	3.5735	978	AAT/TTC	54.8	54.24	3.5596
979	GAA/TAG	54.8	54.00	3.5551	980	GAT/CCG	54.8	54.67	3.5679	981	TGG/TCG	54.8	55.46	3.5830
982	GGT/ATG	54.8	53.78	3.5509	983	GCT/CTG	54.8	53.91	3.5535	984	TTA/CAT	54.8	50.81	3.4941
985	GCT/GGT	54.8	54.99	3.5741	986	TGG/CGC	54.8	55.89	3.5912	987	TGG/AAT	54.8	54.35	3.5619
988	TGC/CTG	54.8	54.30	3.5609	989	GGC/ATA	54.7	52.66	3.5295	990	GGC/CTA	54.7	55.29	3.5798
991	GTT/AAT	54.7	53.86	3.5525	992	GTA/ACT	54.7	53.70	3.5494	993	CTG/GCT	54.7	54.94	3.5731
994	AAA/TCT	54.7	54.30	3.5608	995	GTC/CGT	54.7	55.77	3.5889	996	TAC/CGG	54.7	54.53	3.5653
997	GAA/CAA	54.7	55.72	3.5880	998	CAG/GCA	54.7	56.35	3.6001	999	CAC/GGA	54.7	53.60	3.5474
1000	CGC/GTA	54.7	55.22	3.5784	1001	AAA/TTA	54.7	55.07	3.5756	1002	TAG/TCC	54.7	55.45	3.5829
1003	ATG/CGC	54.7	55.17	3.5774	1004	CGA/CGC	54.7	54.35	3.5617	1005	GTA/ATC	54.7	53.96	3.5544
1006	GCC/GAG	54.7	55.16	3.5773	1007	GTG/CCG	54.7	54.87	3.5717	1008	GGA/TCG	54.7	56.26	3.5983
1009	GTG/AGG	54.7	53.99	3.5550	1010	CCA/TGT	54.7	52.98	3.5355	1011	TCA/ATT	54.7	52.78	3.5317
1012	GAG/AAT	54.7	55.40	3.5819	1013	GAT/CAT	54.7	56.27	3.5985	1014	GCA/AGA	54.7	54.57	3.5661
1015	GAT/GGA	54.7	53.94	3.5540	1016	AGT/ACG	54.7	53.48	3.5451	1017	GAC/TCG	54.7	54.68	3.5681
1018	CCG/GAT	54.7	55.81	3.5897	1019	GTG/AGT	54.7	54.47	3.5641	1020	CGT/GGT	54.7	55.85	3.5904
1021	GGT/CTT	54.7	55.77	3.5890	1022	CCC/CAT	54.6	54.85	3.5713	1023	TAA/AAG	54.6	53.76	3.5505
1024	TTG/AGT	54.6	53.09	3.5377	1025	GGA/GTT	54.6	53.39	3.5434	1026	ATT/AAA	54.6	51.98	3.5164
1027	GAG/AAA	54.6	55.80	3.5896	1028	AAT/TAA	54.6	53.99	3.5549	1029	GGT/TAA	54.6	52.73	3.5309
1030	GGC/ACA	54.6	53.05	3.5370	1031	GTT/AGA	54.6	54.46	3.5639	1032	CAA/GGA	54.6	55.47	3.5833
1033	CTC/GGA	54.6	55.90	3.5914	1034	GAG/ATA	54.6	54.57	3.5660	1035	GTG/CTA	54.6	57.04	3.6132
1036	GGC/GCC	54.6	51.40	3.5054	1037	TTG/GCC	54.6	53.82	3.5518	1038	GGA/AGC	54.6	55.84	3.5903
1039	GCG/GTC	54.6	55.89	3.5912	1040	AGA/ACG	54.6	53.41	3.5439	1041	AGA/CCG	54.6	52.73	3.5309
1042	GCT/CCG	54.6	54.01	3.5553	1043	CAG/GCG	54.6	55.55	3.5848	1044	CCG/GCG	54.6	56.14	3.5961
1045	GCC/GCG	54.6	53.68	3.5489	1046	GCT/TGG	54.6	54.79	3.5702	1047	GAT/TTG	54.6	54.84	3.5711
1048	GGT/AAT	54.6	53.86	3.5525	1049	GTT/CGC	54.6	55.38	3.5815	1050	GTT/TAG	54.6	54.65	3.5675
1051	GTG/ACT	54.6	54.44	3.5636	1052	AGG/CCT	54.6	53.31	3.5419	1053	TGG/ATA	54.6	52.90	3.5340
1054	TAC/ATT	54.6	52.09	3.5187	1055	GTA/ATA	54.5	53.77	3.5506	1056	TAA/AGG	54.5	53.38	3.5432
1057	GGC/CAT	54.5	56.06	3.5944	1058	TTG/TCC	54.5	54.47	3.5641	1059	CGC/TTG	54.5	52.93	3.5347
1060	ACT/TGT	54.5	56.57	3.6043	1061	GTG/AAT	54.5	55.00	3.5742	1062	GTG/TAT	54.5	54.65	3.5675
1063	AAA/TGT	54.5	56.51	3.6032	1064	GGT/ATT	54.5	53.15	3.5389	1065	CCG/GAA	54.5	55.62	3.5861
1066	GAC/ATA	54.5	51.77	3.5124	1067	GTT/ATA	54.5	54.22	3.5594	1068	ATT/TTA	54.5	54.64	3.5674
1069	AAG/AAC	54.5	54.86	3.5716	1070	CGC/AGC	54.5	53.33	3.5423	1071	GTG/TGC	54.5	54.03	3.5557

(continued on next page)



(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
1072	TAG/TGC	54.5	56.84	3.6094	1073	GAA/GAG	54.5	53.43	3.5443	1074	TCG/GGG	54.5	55.04	3.5751
1075	GCT/AGT	54.5	55.27	3.5794	1076	GAA/GGT	54.5	54.65	3.5675	1077	GTA/AGA	54.4	53.59	3.5473
1078	ACT/GGG	54.4	55.79	3.5893	1079	AGC/ATG	54.4	55.47	3.5832	1080	CGC/ATG	54.4	54.78	3.5700
1081	CCT/GAT	54.4	54.68	3.5682	1082	GTT/CTT	54.4	54.93	3.5730	1083	GTA/TTT	54.4	51.95	3.5160
1084	TTC/AAT	54.4	52.78	3.5317	1085	GCG/CAA	54.4	54.53	3.5653	1086	CAA/GAA	54.4	55.28	3.5795
1087	ACT/AGA	54.4	52.41	3.5248	1088	GCC/AGA	54.4	53.42	3.5440	1089	CGA/GGA	54.4	55.61	3.5859
1090	TAG/GTA	54.4	54.21	3.5591	1091	TGT/GTA	54.4	52.67	3.5296	1092	GAG/TTA	54.4	54.69	3.5683
1093	TGA/AAC	54.4	52.42	3.5249	1094	ATG/GCC	54.4	54.16	3.5581	1095	GCG/TCC	54.4	55.61	3.5859
1096	GGT/CTC	54.4	55.17	3.5776	1097	GCG/AAG	54.4	53.49	3.5453	1098	GCA/CAG	54.4	55.87	3.5910
1099	GTA/TAG	54.4	54.63	3.5671	1100	AGA/GCG	54.4	55.92	3.5918	1101	GTC/GCG	54.4	53.96	3.5543
1102	GAG/ATG	54.4	54.26	3.5601	1103	CTT/GTG	54.4	53.30	3.5418	1104	ATA/CAT	54.4	50.59	3.4898
1105	TAA/GGT	54.4	54.64	3.5674	1106	CAA/ATT	54.4	51.59	3.5090	1107	TTA/AGG	54.4	54.35	3.5619
1108	GCA/AAA	54.4	53.52	3.5458	1109	GAC/GCG	54.4	53.99	3.5550	1110	TCA/AAT	54.4	53.25	3.5408
1111	AAA/AGT	54.4	53.34	3.5425	1112	CGC/GGT	54.4	55.60	3.5857	1113	TGA/ATG	54.3	53.74	3.5502
1114	TAT/AGG	54.3	52.89	3.5338	1115	CAG/TCC	54.3	54.41	3.5630	1116	GAA/ATA	54.3	52.92	3.5344
1117	GCG/CTA	54.3	55.15	3.5772	1118	AAC/TTA	54.3	53.98	3.5547	1119	TAG/CAC	54.3	52.91	3.5343
1120	GGT/TCC	54.3	53.32	3.5422	1121	TTG/CGC	54.3	55.03	3.5748	1122	CAA/GGC	54.3	54.57	3.5661
1123	TAT/ATC	54.3	52.11	3.5190	1124	TCG/GTC	54.3	55.17	3.5776	1125	AAC/AAG	54.3	53.85	3.5522
1126	CGA/AAG	54.3	54.54	3.5654	1127	CCA/GCG	54.3	56.04	3.5942	1128	GGA/GCG	54.3	55.56	3.5850
1129	TAG/AGG	54.3	51.28	3.5031	1130	GCA/TGG	54.3	54.39	3.5626	1131	GAG/TTG	54.3	54.39	3.5626
1132	GGT/TCT	54.3	53.76	3.5505	1133	CTT/GTT	54.3	55.42	3.5822	1134	TCT/ATA	54.3	52.11	3.5190
1135	GCA/CAA	54.3	54.44	3.5636	1136	CGC/CTG	54.3	54.59	3.5664	1137	GGA/TCA	54.3	54.50	3.5647
1138	GAT/AAT	54.3	54.63	3.5671	1139	AGA/GTT	54.3	52.52	3.5268	1140	TTG/AGA	54.2	51.97	3.5163
1141	TTG/CTC	54.2	54.40	3.5627	1142	GTA/CCA	54.2	53.79	3.5511	1143	TTT/AGG	54.2	52.77	3.5316
1144	CTC/GGT	54.2	55.15	3.5770	1145	GAC/CAA	54.2	54.68	3.5682	1146	AGA/TAA	54.2	54.91	3.5725
1147	CGC/GGA	54.2	55.26	3.5791	1148	TTA/ATA	54.2	52.10	3.5188	1149	CAA/GAC	54.2	54.87	3.5718
1150	CGC/CGC	54.2	54.14	3.5578	1151	GTC/CGC	54.2	55.45	3.5829	1152	CGC/GTC	54.2	55.04	3.5751
1153	TAC/TGG	54.2	53.60	3.5474	1154	TGC/TGG	54.2	53.25	3.5408	1155	CAC/GAT	54.2	52.92	3.5345
1156	GGA/GAT	54.2	53.07	3.5372	1157	GGT/ACT	54.2	53.40	3.5437	1158	ATA/GGT	54.2	53.02	3.5364
1159	TGG/CCA	54.2	53.80	3.5513	1160	TGC/CGA	54.2	51.52	3.5077	1161	GGC/TCA	54.2	53.40	3.5437
1162	CTG/ATC	54.1	55.45	3.5829	1163	GTT/GAG	54.1	54.03	3.5557	1164	GTG/GAT	54.1	54.03	3.5557
1165	AGG/TAT	54.1	54.89	3.5721	1166	AGG/ACT	54.1	53.98	3.5547	1167	CCT/GTT	54.1	53.81	3.5515
1168	TAA/ATC	54.1	52.17	3.5201	1169	CTG/GCA	54.1	55.66	3.5868	1170	TCT/TGA	54.1	51.86	3.5143
1171	GAA/CAC	54.1	55.99	3.5932	1172	ATT/TAC	54.1	53.06	3.5371	1173	TCG/TAC	54.1	54.94	3.5731
1174	AAG/ACC	54.1	53.93	3.5537	1175	GAC/CGC	54.1	54.07	3.5564	1176	CGG/CTC	54.1	54.98	3.5739
1177	CGG/TTC	54.1	53.82	3.5518	1178	GTG/ACG	54.1	52.48	3.5261	1179	CAT/GCG	54.1	53.88	3.5529
1180	GTC/TCG	54.1	53.52	3.5458	1181	TGT/TCG	54.1	54.79	3.5702	1182	AGC/AGG	54.1	55.17	3.5774
1183	CCT/AGG	54.1	53.54	3.5463	1184	GCC/GTG	54.1	54.29	3.5606	1185	AGA/GAT	54.1	52.78	3.5319
1186	CAT/GCT	54.1	53.84	3.5520	1187	CAA/CTT	54.1	50.62	3.4906	1188	TGA/GCA	54.1	54.50	3.5647
1189	TGG/AGT	54.1	52.84	3.5329	1190	TAC/GCG	54.1	53.81	3.5515	1191	GGT/GTA	54.0	52.51	3.5266
1192	AGC/CTG	54.0	54.55	3.5655	1193	CGG/CCT	54.0	52.88	3.5337	1194	GTT/AGT	54.0	52.97	3.5354
1195	AAA/CGT	54.0	52.98	3.5355	1196	AAA/GGT	54.0	53.39	3.5434	1197	ACA/TTT	54.0	54.23	3.5595
1198	AGG/TTT	54.0	53.30	3.5418	1199	TAG/AGT	54.0	51.97	3.5163	1200	GCG/AAA	54.0	55.23	3.5787
1201	TAG/AAA	54.0	51.48	3.5069	1202	TCT/AAA	54.0	52.17	3.5201	1203	CAC/GAA	54.0	53.54	3.5463
1204	TAT/ACA	54.0	51.83	3.5137	1205	CCG/GTA	54.0	54.78	3.5700	1206	CTC/GTA	54.0	54.89	3.5721
1207	TTT/AAC	54.0	52.78	3.5317	1208	ATA/TAC	54.0	53.52	3.5460	1209	GGT/AGC	54.0	54.34	3.5616
1210	CTA/GGC	54.0	55.33	3.5805	1211	AAA/TTC	54.0	54.30	3.5608	1212	GTG/AAG	54.0	53.87	3.5526
1213	GAT/CAG	54.0	56.43	3.6017	1214	GTG/TAG	54.0	53.52	3.5460	1215	GCT/GCG	54.0	53.20	3.5398
1216	GCA/TCG	54.0	52.67	3.5296	1217	AAA/CGG	54.0	53.23	3.5403	1218	CAC/CGG	54.0	54.85	3.5714
1219	CCA/CGG	54.0	51.20	3.5016	1220	ATG/GAT	54.0	53.80	3.5513	1221	CTA/TAT	54.0	51.00	3.4977
1222	GAT/ATT	54.0	53.19	3.5396	1223	TGG/ATT	54.0	52.77	3.5316	1224	TTG/ATA	54.0	51.44	3.5061
1225	CAG/ACC	54.0	55.17	3.5776	1226	ATT/GAG	54.0	53.80	3.5513	1227	TGG/GAG	54.0	54.04	3.5558

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
1228	GGC/AGT	54.0	53.82	3.5516	1229	GAT/TAA	54.0	52.24	3.5214	1230	GTA/ACA	54.0	51.89	3.5147
1231	GCA/GGA	54.0	54.30	3.5608	1232	GGT/AAC	54.0	52.91	3.5343	1233	GCA/CAC	54.0	54.32	3.5613
1234	CTG/CGC	54.0	55.61	3.5859	1235	AGG/CCG	54.0	53.49	3.5454	1236	TTG/AGG	54.0	52.84	3.5329
1237	CCG/GTT	54.0	54.48	3.5643	1238	GGC/ACC	53.9	51.80	3.5131	1239	CAA/AGT	53.9	52.95	3.5350
1240	CGG/ACA	53.9	53.95	3.5542	1241	GAA/CCA	53.9	55.06	3.5755	1242	CGC/CGA	53.9	54.10	3.5570
1243	AAT/GGA	53.9	52.85	3.5331	1244	AAT/TGA	53.9	56.07	3.5947	1245	CCA/GAC	53.9	54.86	3.5716
1246	TTG/CCC	53.9	53.72	3.5498	1247	AGC/TCC	53.9	54.49	3.5646	1248	CAC/GGC	53.9	52.96	3.5353
1249	CAT/GGC	53.9	53.15	3.5388	1250	ATG/CTC	53.9	54.94	3.5731	1251	GCG/TTC	53.9	55.03	3.5748
1252	AGC/AAG	53.9	54.66	3.5676	1253	GCT/AAG	53.9	54.12	3.5574	1254	ACC/GAG	53.9	52.83	3.5327
1255	AAA/TAG	53.9	55.58	3.5854	1256	AAC/ACG	53.9	51.73	3.5117	1257	AAA/AGG	53.9	52.98	3.5355
1258	ATA/AGG	53.9	52.65	3.5293	1259	AGT/TGG	53.9	54.81	3.5706	1260	GGG/AAT	53.9	54.68	3.5681
1261	GAA/ACT	53.9	54.30	3.5609	1262	GGA/TGT	53.9	53.12	3.5382	1263	CGC/GTT	53.9	54.15	3.5580
1264	CCA/GAA	53.9	55.23	3.5787	1265	TGG/CCT	53.9	53.15	3.5389	1266	CGC/AAG	53.8	53.68	3.5489
1267	AGA/TTG	53.8	54.70	3.5685	1268	GAT/CCT	53.8	54.85	3.5713	1269	AGA/GGT	53.8	52.98	3.5355
1270	TGA/TTT	53.8	52.32	3.5231	1271	GGA/AAC	53.8	54.45	3.5637	1272	ATT/CAA	53.8	50.59	3.4898
1273	ATC/TAA	53.8	53.52	3.5460	1274	GCG/CCA	53.8	54.40	3.5627	1275	ATT/TCA	53.8	53.59	3.5473
1276	CGG/TCA	53.8	53.80	3.5512	1277	TAG/AGA	53.8	51.18	3.5011	1278	GCT/ATA	53.8	53.12	3.5384
1279	AAT/CTA	53.8	50.27	3.4838	1280	AAG/CAC	53.8	52.61	3.5286	1281	CCT/GAC	53.8	54.17	3.5584
1282	CGT/CGC	53.8	53.79	3.5511	1283	GAA/CGC	53.8	55.42	3.5822	1284	CCA/GTC	53.8	53.91	3.5535
1285	AAT/TAG	53.8	53.51	3.5457	1286	GAT/TAG	53.8	52.87	3.5334	1287	AAA/ACG	53.8	53.69	3.5492
1288	GCG/TGG	53.8	54.15	3.5580	1289	TCC/GTG	53.8	53.93	3.5537	1290	TAA/GAT	53.8	52.56	3.5276
1291	TGC/GAA	53.8	53.86	3.5525	1292	TGA/GGT	53.8	53.15	3.5388	1293	GAT/CAC	53.7	55.36	3.5811
1294	TGA/GCC	53.7	54.35	3.5619	1295	TCC/TAG	53.7	54.42	3.5631	1296	GAG/ACG	53.7	54.02	3.5554
1297	AGG/TTG	53.7	54.55	3.5657	1298	TGA/ATA	53.7	52.01	3.5171	1299	GGG/ATG	53.7	54.52	3.5650
1300	TTC/TTG	53.7	53.61	3.5477	1301	CTT/TAA	53.7	51.00	3.4977	1302	AGG/CCA	53.7	53.95	3.5542
1303	GAC/CCA	53.7	53.44	3.5444	1304	TGA/TCA	53.7	52.91	3.5343	1305	GCG/TGA	53.7	55.15	3.5770
1306	AGG/TTA	53.7	53.86	3.5525	1307	CAG/AAC	53.7	53.94	3.5539	1308	TCC/GCC	53.7	54.98	3.5739
1309	ACG/TCC	53.7	55.28	3.5797	1310	CTT/GTC	53.7	54.55	3.5657	1311	AAA/AAG	53.7	52.90	3.5340
1312	CAC/AAG	53.7	53.52	3.5460	1313	GGG/AAG	53.7	54.34	3.5616	1314	ATA/TTG	53.7	54.61	3.5668
1315	GCC/TTG	53.7	53.79	3.5511	1316	GAA/GCT	53.7	52.64	3.5290	1317	GAA/TCT	53.7	52.34	3.5234
1318	TGA/TAT	53.7	51.92	3.5153	1319	CTG/TTC	53.7	54.46	3.5640	1320	GTT/CCG	53.7	54.08	3.5567
1321	ATC/CGG	53.7	53.80	3.5513	1322	GCC/AAA	53.6	52.55	3.5273	1323	GGG/AAA	53.6	54.85	3.5714
1324	GTG/AAA	53.6	54.98	3.5738	1325	TTT/CAA	53.6	50.81	3.4941	1326	CGG/CCA	53.6	53.53	3.5461
1327	CCT/CGA	53.6	52.06	3.5180	1328	ATG/ACC	53.6	53.81	3.5515	1329	GAT/AGC	53.6	55.06	3.5753
1330	GCA/AGC	53.6	54.02	3.5556	1331	GGC/AGC	53.6	53.78	3.5509	1332	GAT/CGC	53.6	54.29	3.5606
1333	GTA/CTC	53.6	54.30	3.5608	1334	ACG/GTC	53.6	54.31	3.5610	1335	GTA/GAG	53.6	54.01	3.5553
1336	CAC/TAG	53.6	53.74	3.5502	1337	CAC/ACG	53.6	53.26	3.5411	1338	GAT/ACG	53.6	53.15	3.5389
1339	GAA/TTG	53.6	54.55	3.5655	1340	GAA/TAT	53.6	52.90	3.5341	1341	GAC/CCT	53.6	53.49	3.5453
1342	GAT/ACA	53.6	52.44	3.5253	1343	TGC/GCA	53.6	53.40	3.5437	1344	GGC/AAC	53.6	52.86	3.5333
1345	CGC/TAG	53.6	53.75	3.5504	1346	TGG/CCG	53.6	53.34	3.5425	1347	GTT/ATG	53.6	52.92	3.5344
1348	TAG/GTG	53.6	53.90	3.5532	1349	TAT/GTG	53.6	54.36	3.5620	1350	CCG/AGT	53.6	54.04	3.5558
1351	CGC/CGT	53.6	53.60	3.5475	1352	GTG/ATT	53.6	53.60	3.5474	1353	CTC/GTT	53.6	54.22	3.5594
1354	GAG/TTT	53.6	54.05	3.5560	1355	TCA/AAG	53.6	52.42	3.5249	1356	GGA/GGT	53.5	52.89	3.5338
1357	GCA/CTA	53.5	54.18	3.5585	1358	TGA/GAC	53.5	53.31	3.5419	1359	GTA/CCC	53.5	54.13	3.5577
1360	GTT/CTC	53.5	53.90	3.5532	1361	TTA/GGT	53.5	53.18	3.5395	1362	AGA/CTT	53.5	52.54	3.5272
1363	TTT/ACA	53.5	52.09	3.5187	1364	CCG/GCA	53.5	54.75	3.5695	1365	CCT/GCA	53.5	52.87	3.5334
1366	AAT/TCA	53.5	52.92	3.5345	1367	ACA/TGA	53.5	55.89	3.5912	1368	CAT/GAC	53.5	53.85	3.5523
1369	TGT/GAG	53.5	53.32	3.5422	1370	AAC/GCG	53.5	51.86	3.5143	1371	TGA/TCG	53.5	54.72	3.5689
1372	ATC/CTG	53.5	52.68	3.5299	1373	TGC/CGT	53.5	51.10	3.4997	1374	GCG/CTT	53.5	55.17	3.5776
1375	CCA/GTA	53.5	54.31	3.5610	1376	GTA/AAC	53.4	53.14	3.5386	1377	TAA/GAG	53.4	53.53	3.5461
1378	ATC/ACG	53.4	52.24	3.5215	1379	GTA/TCT	53.4	51.33	3.5040	1380	GGC/CTT	53.4	54.06	3.5563
1381	GTA/GTT	53.4	51.91	3.5151	1382	CGG/CCG	53.4	53.07	3.5372	1383	AGA/ATG	53.4	52.91	3.5343

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
1384	CAT/TTA	53.4	49.78	3.4743	1385	CTT/AAA	53.4	51.52	3.5077	1386	CAC/GCA	53.4	52.61	3.5286
1387	GGG/AGA	53.4	55.34	3.5808	1388	ACG/GAC	53.4	53.94	3.5540	1389	CAG/TAC	53.4	53.82	3.5516
1390	CTG/ACC	53.4	54.41	3.5630	1391	GGC/TCC	53.4	52.17	3.5201	1392	GGC/CTC	53.4	55.71	3.5878
1393	CTA/GTC	53.4	55.19	3.5779	1394	TTA/ATG	53.4	53.09	3.5378	1395	CTA/AAT	53.4	51.52	3.5077
1396	TGT/AAT	53.4	53.09	3.5378	1397	GCT/CAT	53.4	53.82	3.5516	1398	CAC/GCT	53.4	52.38	3.5242
1399	ATA/AGT	53.4	52.19	3.5205	1400	TCT/GGT	53.4	54.16	3.5582	1401	GGG/ATT	53.4	54.52	3.5651
1402	ATA/GTT	53.4	51.83	3.5137	1403	TTA/GTT	53.4	52.21	3.5208	1404	ACC/GTG	53.4	53.12	3.5382
1405	GTC/AGT	53.4	53.41	3.5439	1406	GGA/GCA	53.3	53.78	3.5509	1407	GCT/CAC	53.3	53.66	3.5487
1408	GAT/GTG	53.3	53.73	3.5499	1409	ACT/GGT	53.3	54.27	3.5603	1410	GAG/ATT	53.3	53.91	3.5535
1411	GTC/ATA	53.3	53.71	3.5497	1412	GAA/ACA	53.3	52.54	3.5272	1413	GTT/ACA	53.3	52.95	3.5350
1414	CTA/GCA	53.3	54.31	3.5610	1415	GAG/GTA	53.3	53.57	3.5470	1416	TTC/AAC	53.3	52.15	3.5198
1417	TCG/CAC	53.3	52.09	3.5187	1418	CAG/CCC	53.3	54.06	3.5563	1419	CAA/GCC	53.3	52.80	3.5321
1420	GGA/ATC	53.3	54.52	3.5651	1421	TCG/CTC	53.3	54.06	3.5563	1422	TCG/TTC	53.3	54.41	3.5629
1423	CCT/GCG	53.3	54.75	3.5695	1424	CTA/GCG	53.3	55.62	3.5861	1425	CCG/CGG	53.3	50.92	3.4963
1426	TGA/GGG	53.3	54.02	3.5554	1427	TGT/ATG	53.3	52.29	3.5225	1428	GAC/AAT	53.3	53.11	3.5381
1429	GAT/CCC	53.3	54.04	3.5558	1430	GTG/ATG	53.3	53.43	3.5442	1431	AAA/CTG	53.3	51.20	3.5016
1432	AGT/TTG	53.3	52.84	3.5329	1433	GTC/AAT	53.3	52.67	3.5296	1434	TAG/AAT	53.3	52.12	3.5192
1435	TCA/ACT	53.3	52.15	3.5198	1436	CGA/AGT	53.3	52.36	3.5238	1437	AGA/AAT	53.3	52.70	3.5302
1438	GAG/ACT	53.3	53.85	3.5523	1439	AGA/ATT	53.3	52.38	3.5241	1440	TGC/GCT	53.2	52.50	3.5265
1441	GTC/CTA	53.2	53.99	3.5549	1442	GAG/CAG	53.2	55.56	3.5850	1443	GAG/TAG	53.2	51.98	3.5164
1444	TGA/GAA	53.2	53.55	3.5466	1445	TAG/ACA	53.2	51.33	3.5040	1446	CAA/GCA	53.2	54.06	3.5563
1447	TGG/AGA	53.2	51.28	3.5031	1448	TAT/GGA	53.2	53.11	3.5381	1449	CAT/ATA	53.2	49.61	3.4712
1450	CAG/CAC	53.2	50.74	3.4929	1451	CAC/GAC	53.2	52.16	3.5199	1452	TGG/TGC	53.2	53.74	3.5501
1453	GGT/ATC	53.2	52.55	3.5273	1454	CCT/GTC	53.2	53.16	3.5391	1455	ATA/GAG	53.2	53.78	3.5509
1456	GTG/GAG	53.2	52.87	3.5336	1457	TGG/AGG	53.2	52.67	3.5296	1458	CAC/TGG	53.2	54.02	3.5554
1459	GAC/CAT	53.2	54.45	3.5637	1460	GCG/GCT	53.2	53.88	3.5529	1461	AAG/TCT	53.2	53.66	3.5485
1462	GCC/GGT	53.2	53.28	3.5413	1463	ATG/TGT	53.2	54.24	3.5598	1464	ATA/ATT	53.2	51.92	3.5154
1465	TGA/GTG	53.2	52.83	3.5327	1466	TAT/AAG	53.2	52.01	3.5171	1467	TAA/TAG	53.2	52.97	3.5354
1468	GTC/CCA	53.1	52.96	3.5353	1469	CGT/AGA	53.1	50.65	3.4910	1470	AGA/CAG	53.1	54.00	3.5551
1471	AAA/GAT	53.1	51.54	3.5081	1472	AGT/GCT	53.1	53.40	3.5437	1473	GAC/ACA	53.1	51.26	3.5027
1474	GTG/ACA	53.1	54.68	3.5682	1475	GTG/AGA	53.1	55.34	3.5808	1476	TTA/AGA	53.1	52.12	3.5192
1477	AGT/GGA	53.1	51.69	3.5110	1478	ATT/TGA	53.1	55.71	3.5879	1479	TGA/TAC	53.1	51.50	3.5073
1480	CCA/GCC	53.1	53.46	3.5449	1481	GCT/AGC	53.1	53.49	3.5453	1482	GTA/AGC	53.1	52.84	3.5329
1483	CTC/GGC	53.1	54.29	3.5606	1484	CTT/GGC	53.1	54.76	3.5696	1485	GAT/GAG	53.1	52.24	3.5214
1486	TTC/GCG	53.1	53.01	3.5362	1487	TTC/TCG	53.1	52.82	3.5326	1488	CGA/AGG	53.1	54.33	3.5615
1489	GCA/GTG	53.1	51.61	3.5094	1490	TAA/TAT	53.1	52.44	3.5253	1491	GCA/ACT	53.1	52.89	3.5338
1492	TGT/GCT	53.1	53.76	3.5505	1493	CGG/ACG	53.1	53.49	3.5454	1494	TGA/CTT	53.1	51.01	3.4980
1495	GGC/ACT	53.1	52.14	3.5195	1496	GGC/TCT	53.1	52.50	3.5265	1497	TAA/AAA	53.1	51.27	3.5029
1498	GTA/TAA	53.1	53.63	3.5481	1499	GCA/AAC	53.1	53.11	3.5381	1500	CTG/TCC	53.1	53.78	3.5509
1501	TGA/CCG	53.1	52.58	3.5279	1502	AAA/ATG	53.1	51.79	3.5128	1503	GTA/GCT	53.1	52.31	3.5228
1504	GTT/ATT	53.1	52.77	3.5316	1505	GTC/CTT	53.1	53.57	3.5468	1506	TCA/GAG	53.0	52.39	3.5243
1507	TAG/GTT	53.0	53.55	3.5466	1508	GGT/GAA	53.0	51.58	3.5089	1509	TAT/TAA	53.0	51.73	3.5117
1510	AGA/GCA	53.0	54.15	3.5580	1511	TGC/TCA	53.0	51.77	3.5124	1512	ACA/GGA	53.0	53.57	3.5470
1513	GGT/GGA	53.0	51.39	3.5053	1514	GGT/TGA	53.0	51.77	3.5126	1515	AAG/GTA	53.0	53.80	3.5513
1516	TGC/AAC	53.0	51.71	3.5114	1517	AGA/TAC	53.0	53.08	3.5375	1518	CTG/CCC	53.0	53.13	3.5385
1519	TAG/CCC	53.0	54.75	3.5695	1520	TCG/TCC	53.0	53.90	3.5532	1521	ACA/TGC	53.0	55.35	3.5809
1522	CAG/TGC	53.0	56.22	3.5975	1523	TTA/TAG	53.0	52.74	3.5310	1524	TAG/ACG	53.0	50.96	3.4970
1525	CTG/GCG	53.0	55.07	3.5756	1526	ATA/CGG	53.0	51.16	3.5007	1527	TTC/CGG	53.0	53.52	3.5458
1528	TGG/GAT	53.0	52.90	3.5340	1529	CTT/GCT	53.0	53.41	3.5439	1530	GCA/ATT	53.0	53.47	3.5450
1531	ATG/TTT	53.0	53.54	3.5463	1532	GTC/ACA	53.0	50.68	3.4917	1533	TGA/ATC	53.0	51.11	3.4999
1534	CTG/CTC	53.0	53.90	3.5532	1535	TCT/AAG	53.0	51.12	3.5000	1536	GTT/TAT	53.0	53.51	3.5457
1537	GTT/CCT	53.0	53.76	3.5505	1538	CTC/GCT	53.0	53.21	3.5399	1539	GAG/TCT	52.9	52.77	3.5316

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
1540	TGG/GAA	52.9	53.36	3.5429	1541	GTG/TAA	52.9	54.63	3.5671	1542	TAA/AGA	52.9	51.48	3.5069
1543	TGA/CAC	52.9	51.88	3.5145	1544	AAG/CCC	52.9	53.18	3.5394	1545	GAA/CCC	52.9	54.60	3.5665
1546	TGA/AGC	52.9	51.40	3.5054	1547	CCG/ATC	52.9	54.75	3.5695	1548	TGC/CAG	52.9	53.90	3.5532
1549	CGT/ACG	52.9	52.80	3.5321	1550	GCG/TCG	52.9	51.70	3.5111	1551	CCT/CGG	52.9	51.61	3.5094
1552	AGA/GGG	52.9	55.15	3.5770	1553	GGA/GGG	52.9	52.74	3.5310	1554	CTC/ATG	52.9	53.22	3.5402
1555	TAA/GTG	52.9	54.06	3.5563	1556	CCT/GCT	52.9	52.94	3.5348	1557	ATG/TCT	52.9	53.13	3.5385
1558	AAG/AGT	52.9	52.04	3.5177	1559	TAT/AGT	52.9	51.44	3.5061	1560	AAG/CGT	52.9	52.42	3.5249
1561	GCT/CTT	52.9	53.57	3.5470	1562	TAG/ACT	52.8	51.88	3.5145	1563	GAT/ACT	52.8	52.34	3.5234
1564	GCA/ATA	52.8	52.00	3.5168	1565	TTT/GAG	52.8	52.98	3.5355	1566	CTC/ACG	52.8	52.41	3.5248
1567	GTT/ACG	52.8	51.90	3.5150	1568	AGT/CCG	52.8	52.80	3.5321	1569	TCA/ATG	52.8	52.01	3.5170
1570	TAT/AAT	52.8	52.10	3.5188	1571	GTC/CCT	52.8	52.94	3.5348	1572	ATG/GAA	52.8	53.78	3.5509
1573	AGC/CGA	52.8	51.60	3.5091	1574	GCC/GGA	52.8	53.12	3.5384	1575	TCA/GGA	52.8	53.46	3.5447
1576	AGT/ATA	52.8	51.24	3.5023	1577	GGG/ATA	52.8	54.76	3.5697	1578	CCG/AAC	52.8	53.18	3.5394
1579	ATC/TAC	52.8	52.44	3.5253	1580	CAT/GCC	52.8	52.87	3.5336	1581	TGT/GCC	52.8	53.32	3.5422
1582	TTG/TGC	52.8	54.13	3.5577	1583	GCA/CTC	52.8	53.29	3.5416	1584	ATA/AAG	52.8	51.61	3.5094
1585	TAG/AAG	52.8	51.26	3.5027	1586	TCG/AAG	52.8	51.40	3.5054	1587	TGT/CCG	52.8	52.64	3.5292
1588	GCC/TCG	52.8	53.52	3.5460	1589	TAC/TCG	52.8	53.26	3.5409	1590	AAG/GTG	52.8	53.50	3.5456
1591	AAT/GTG	52.8	53.96	3.5543	1592	GGA/TTG	52.8	51.16	3.5009	1593	GCT/AAT	52.8	52.83	3.5327
1594	GAA/GAT	52.8	51.69	3.5108	1595	ACA/TAT	52.8	53.98	3.5547	1596	TAC/AGT	52.8	51.04	3.4984
1597	GCA/CCA	52.7	53.43	3.5443	1598	AGA/GCC	52.7	53.99	3.5550	1599	CTC/GTC	52.7	53.82	3.5516
1600	GAG/GAG	52.7	52.27	3.5219	1601	ATC/GCG	52.7	53.07	3.5374	1602	TCG/AAA	52.7	51.21	3.5017
1603	AGT/CAA	52.7	50.41	3.4866	1604	CCC/GAA	52.7	54.17	3.5584	1605	GTG/GAA	52.7	54.01	3.5553
1606	TTG/ACA	52.7	51.04	3.4984	1607	AAT/AGA	52.7	52.40	3.5245	1608	AGT/GTA	52.7	51.89	3.5147
1609	TCT/GTA	52.7	51.63	3.5097	1610	TGG/GTA	52.7	52.79	3.5320	1611	TGT/TTA	52.7	51.36	3.5047
1612	TGT/AAC	52.7	52.01	3.5170	1613	GAC/CAC	52.7	53.18	3.5395	1614	CCG/ACC	52.7	54.07	3.5564
1615	TGT/AGC	52.7	51.47	3.5067	1616	GCA/GGC	52.7	53.74	3.5501	1617	CAA/ACG	52.7	53.66	3.5485
1618	TAA/GCG	52.7	51.98	3.5165	1619	TCC/TTG	52.7	53.29	3.5415	1620	GCA/GAT	52.7	51.33	3.5040
1621	GGT/GCT	52.7	53.02	3.5364	1622	CTA/AGT	52.7	51.77	3.5124	1623	TTA/GAG	52.7	52.95	3.5351
1624	TCA/ACG	52.7	51.71	3.5114	1625	CGT/CGA	52.7	50.83	3.4946	1626	CTC/CAG	52.7	55.29	3.5798
1627	TCC/GCG	52.7	52.88	3.5337	1628	AGA/CAT	52.7	52.39	3.5243	1629	TGA/CAT	52.7	51.71	3.5114
1630	GAG/GCT	52.7	51.43	3.5060	1631	GAT/GCT	52.7	52.70	3.5302	1632	CGT/CAA	52.6	48.92	3.4580
1633	TGT/GAA	52.6	52.13	3.5194	1634	GAG/ACA	52.6	53.37	3.5430	1635	GAC/AAC	52.6	52.32	3.5229
1636	CCG/TAC	52.6	52.50	3.5263	1637	CAC/GCC	52.6	50.48	3.4878	1638	TGC/CGC	52.6	52.17	3.5201
1639	TGT/ATC	52.6	50.51	3.4884	1640	ATG/GAG	52.6	52.65	3.5293	1641	CGA/ACG	52.6	52.73	3.5309
1642	AAA/CCG	52.6	51.54	3.5081	1643	AGA/TGG	52.6	55.05	3.5752	1644	ATA/TGG	52.6	55.79	3.5894
1645	CCA/TGG	52.6	49.89	3.4765	1646	ATA/ATG	52.6	51.93	3.5155	1647	GCG/ATG	52.6	52.59	3.5282
1648	GAA/GTG	52.6	53.43	3.5442	1649	TGG/GTG	52.6	53.27	3.5412	1650	TAA/TTG	52.6	52.52	3.5268
1651	GGC/AAT	52.6	52.72	3.5306	1652	GCA/TAT	52.6	51.29	3.5033	1653	GCC/AGT	52.6	53.57	3.5470
1654	TCC/GGT	52.6	52.42	3.5249	1655	GTA/GCA	52.6	51.08	3.4993	1656	GAT/TCA	52.6	50.48	3.4878
1657	CAT/CTA	52.6	48.61	3.4521	1658	GTC/AAC	52.6	52.04	3.5177	1659	TAT/TTG	52.6	52.84	3.5329
1660	TGA/TCC	52.6	52.75	3.5313	1661	TTG/ATT	52.5	51.94	3.5157	1662	TTA/TTT	52.5	51.48	3.5070
1663	GTA/GAA	52.5	52.99	3.5358	1664	TAC/AGA	52.5	51.33	3.5040	1665	GCA/CCC	52.5	53.70	3.5494
1666	TAC/ATC	52.5	50.42	3.4867	1667	CTC/CGG	52.5	54.79	3.5702	1668	TAA/GGG	52.5	53.24	3.5406
1669	GGG/TTG	52.5	51.66	3.5103	1670	AGC/CGT	52.5	51.18	3.5011	1671	ACC/GGT	52.5	52.55	3.5273
1672	TAG/GGT	52.5	52.15	3.5198	1673	TAT/GAA	52.5	51.89	3.5147	1674	TCT/ACA	52.5	50.42	3.4867
1675	AAG/TCA	52.5	52.96	3.5353	1676	GTT/GGA	52.5	52.33	3.5232	1677	GTG/ATA	52.5	53.43	3.5443
1678	ATA/TTA	52.5	53.71	3.5495	1679	TAG/TTA	52.5	52.67	3.5297	1680	CCC/GAC	52.5	53.97	3.5546
1681	CTT/GCC	52.5	53.26	3.5411	1682	CCG/TCC	52.5	53.13	3.5385	1683	TGC/AGC	52.5	49.13	3.4619
1684	GAA/ATC	52.5	52.10	3.5188	1685	AAC/TTC	52.5	52.64	3.5292	1686	CCG/TTC	52.5	53.72	3.5498
1687	GCG/CAG	52.5	54.90	3.5723	1688	AAA/GAG	52.5	53.48	3.5451	1689	GCA/TAG	52.5	51.71	3.5114
1690	GGG/TAG	52.5	52.25	3.5217	1691	ACA/AGG	52.5	51.56	3.5084	1692	GCT/ATG	52.5	51.89	3.5148
1693	GAG/GTG	52.5	53.26	3.5411	1694	CCC/GAT	52.5	54.05	3.5561	1695	GCA/GCT	52.5	51.20	3.5016

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
1696	TAA/GCT	52.5	51.40	3.5054	1697	AAG/GTT	52.5	53.15	3.5388	1698	GCA/GTT	52.5	51.66	3.5104
1699	TCA/GTT	52.5	51.20	3.5016	1700	GAT/TTT	52.5	53.33	3.5423	1701	GAG/GTT	52.5	52.91	3.5343
1702	TCA/TAG	52.5	51.19	3.5014	1703	TAT/ACG	52.5	50.09	3.4804	1704	AGT/TAT	52.4	53.80	3.5512
1705	GTC/TAT	52.4	52.30	3.5226	1706	CGG/ACT	52.4	53.31	3.5419	1707	CGA/CTT	52.4	51.74	3.5118
1708	TAC/AAA	52.4	51.18	3.5011	1709	GCC/CAA	52.4	53.63	3.5480	1710	CTC/GCA	52.4	53.09	3.5378
1711	TTC/AGA	52.4	51.89	3.5147	1712	GCC/ATA	52.4	51.25	3.5026	1713	ACG/GCC	52.4	52.31	3.5228
1714	CGG/TGC	52.4	54.00	3.5551	1715	TGC/ATC	52.4	50.19	3.4822	1716	GTC/CTC	52.4	53.46	3.5447
1717	CCC/GTC	52.4	52.47	3.5258	1718	GCT/CAG	52.4	54.82	3.5707	1719	GCA/GAG	52.4	51.97	3.5163
1720	AAC/CCG	52.4	51.19	3.5013	1721	CAA/AGG	52.4	52.88	3.5337	1722	GAC/ACT	52.4	50.82	3.4943
1723	CAA/CGT	52.4	52.09	3.5187	1724	TCG/CGT	52.4	53.10	3.5379	1725	GAA/TGT	52.4	52.89	3.5338
1726	TGC/ATA	52.4	50.10	3.4805	1727	GTA/TCA	52.4	49.54	3.4697	1728	AAA/AAT	52.4	51.34	3.5043
1729	CCC/GTT	52.4	52.94	3.5348	1730	TAC/CCG	52.3	52.86	3.5333	1731	TTG/GAA	52.3	52.95	3.5350
1732	CCA/GCA	52.3	52.80	3.5321	1733	TCC/GGA	52.3	52.27	3.5219	1734	ATT/ATA	52.3	51.38	3.5050
1735	CCC/GTA	52.3	53.43	3.5442	1736	ATG/TTA	52.3	53.03	3.5365	1737	GAA/AAC	52.3	53.82	3.5516
1738	ATG/CCC	52.3	52.49	3.5262	1739	GAC/CCC	52.3	53.04	3.5368	1740	GTC/AGC	52.3	52.07	3.5182
1741	GGC/ATC	52.3	52.47	3.5258	1742	GGA/GTC	52.3	52.09	3.5187	1743	AAT/AAG	52.3	51.58	3.5089
1744	TCG/GAG	52.3	51.04	3.4986	1745	AAG/TAG	52.3	52.90	3.5341	1746	AAG/ACG	52.3	52.15	3.5198
1747	TTC/CCG	52.3	51.73	3.5117	1748	CTT/GCG	52.3	53.88	3.5528	1749	TGA/CGG	52.3	51.53	3.5079
1750	GTA/GGG	52.3	53.50	3.5456	1751	TCG/ATG	52.3	51.47	3.5067	1752	TCT/ATG	52.3	50.50	3.4883
1753	CTC/CTG	52.3	52.12	3.5191	1754	CTC/TTG	52.3	52.42	3.5249	1755	GCC/CAT	52.3	53.55	3.5464
1756	AAG/TAT	52.3	53.61	3.5477	1757	TCG/GCT	52.3	50.02	3.4789	1758	GCA/TCT	52.3	51.13	3.5001
1759	CAT/AGT	52.3	50.59	3.4900	1760	TGC/AGA	52.3	50.96	3.4970	1761	GTA/TAC	52.3	52.78	3.5319
1762	GTC/CCC	52.3	52.55	3.5273	1763	AGA/TTC	52.3	52.46	3.5256	1764	CGA/AAT	52.3	51.68	3.5107
1765	TCA/GAT	52.3	51.95	3.5158	1766	CGG/TCT	52.3	53.15	3.5388	1767	GTG/GGT	52.3	52.06	3.5180
1768	ACC/TGT	52.3	54.90	3.5724	1769	TAG/TTG	52.2	52.35	3.5236	1770	GAT/TAT	52.2	52.24	3.5214
1771	AGA/AGT	52.2	51.29	3.5033	1772	TTC/CTG	52.2	52.35	3.5236	1773	GTC/TAA	52.2	52.78	3.5319
1774	GGT/GAC	52.2	49.56	3.4702	1775	GTT/AGC	52.2	52.16	3.5199	1776	GTT/GAT	52.2	52.87	3.5334
1777	AAA/GCT	52.2	50.65	3.4911	1778	CTT/CAA	52.2	48.98	3.4592	1779	TCT/GAA	52.2	51.57	3.5087
1780	GAG/TCA	52.2	51.13	3.5001	1781	TGA/AGA	52.2	51.25	3.5026	1782	TGT/GGA	52.2	51.77	3.5124
1783	TCG/ATA	52.2	50.41	3.4866	1784	CCG/CAC	52.2	49.67	3.4723	1785	CCT/GCC	52.2	52.49	3.5262
1786	GAT/ATC	52.2	52.04	3.5177	1787	AAG/AAG	52.2	52.02	3.5172	1788	GGT/TAG	52.2	52.15	3.5197
1789	TTA/GGG	52.2	53.12	3.5382	1790	GGA/TGG	52.2	51.31	3.5037	1791	ATA/CTG	52.2	50.84	3.4947
1792	GGA/GTG	52.2	52.91	3.5343	1793	ATG/TTG	52.2	53.30	3.5418	1794	ATT/TTG	52.2	52.95	3.5351
1795	TTA/TCT	52.2	50.65	3.4910	1796	CAC/AGT	52.2	51.13	3.5001	1797	TGC/AGT	52.2	50.70	3.4920
1798	TGT/AGT	52.2	51.51	3.5074	1799	GAC/ATT	52.2	52.03	3.5174	1800	GCG/ATT	52.2	52.10	3.5188
1801	TTG/GAT	52.2	52.98	3.5355	1802	TAG/GAT	52.2	52.43	3.5251	1803	TAG/TCT	52.2	50.89	3.4956
1804	TGA/TTG	52.2	52.17	3.5201	1805	CGT/ATA	52.1	50.35	3.4854	1806	GAT/AAC	52.1	52.84	3.5330
1807	AGA/GTC	52.1	50.70	3.4920	1808	AGT/CAT	52.1	51.92	3.5153	1809	GTT/ACT	52.1	51.65	3.5101
1810	TAT/GTT	52.1	52.82	3.5326	1811	TCA/AAA	52.1	51.33	3.5041	1812	AGT/GAA	52.1	51.52	3.5077
1813	GGG/TAA	52.1	51.45	3.5064	1814	TTG/TAA	52.1	52.74	3.5310	1815	GCT/ACA	52.1	51.66	3.5103
1816	CCG/AGA	52.1	53.91	3.5533	1817	TGC/TAC	52.1	51.97	3.5163	1818	TCG/CCC	52.1	53.29	3.5416
1819	TTA/AGC	52.1	51.37	3.5049	1820	AAT/ACG	52.1	51.99	3.5167	1821	TCG/ACG	52.1	49.13	3.4619
1822	TTC/TGG	52.1	52.54	3.5272	1823	TCC/CTG	52.1	52.36	3.5238	1824	GCC/AAT	52.1	52.51	3.5266
1825	CTA/CAT	52.1	48.98	3.4592	1826	AAT/TAT	52.1	53.53	3.5461	1827	GCT/CCT	52.1	52.64	3.5292
1828	ACG/AGT	52.1	52.48	3.5261	1829	CAG/AGT	52.1	52.29	3.5224	1830	ACG/CGT	52.1	52.12	3.5191
1831	GGG/TTT	52.1	52.23	3.5212	1832	TGA/CTG	52.1	50.98	3.4974	1833	AGA/CGT	52.1	51.60	3.5093
1834	GGT/TAC	52.1	51.42	3.5057	1835	GCT/CCC	52.1	52.29	3.5224	1836	TTT/TAG	52.1	52.76	3.5314
1837	TCA/GTG	52.1	51.36	3.5047	1838	AAA/ACT	52.1	50.94	3.4966	1839	TAG/GCT	52.1	51.94	3.5157
1840	CGA/ATT	52.1	51.86	3.5143	1841	TAG/TTT	52.0	51.99	3.5167	1842	AAT/AAA	52.0	50.64	3.4909
1843	AAG/TAA	52.0	53.42	3.5440	1844	GAG/TAA	52.0	52.16	3.5199	1845	AGA/ACA	52.0	51.54	3.5080
1846	AAT/CGA	52.0	51.48	3.5069	1847	ATT/GGA	52.0	51.87	3.5144	1848	AAG/ATA	52.0	51.95	3.5158
1849	GCT/GTA	52.0	51.28	3.5030	1850	CTA/GCC	52.0	54.26	3.5601	1851	GCT/GGC	52.0	53.20	3.5398

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
1852	GCT/CTC	52.0	52.55	3.5275	1853	CCC/AAG	52.0	53.35	3.5426	1854	AGC/CAG	52.0	53.26	3.5411
1855	CGA/TAG	52.0	51.40	3.5054	1856	TTA/ACG	52.0	52.03	3.5174	1857	CAC/CCG	52.0	51.80	3.5130
1858	ACA/CGG	52.0	51.19	3.5013	1859	GAA/GGG	52.0	52.84	3.5329	1860	AAT/ATG	52.0	52.11	3.5190
1861	TGT/GAT	52.0	51.77	3.5126	1862	TGG/TAT	52.0	52.01	3.5171	1863	ATA/ACT	52.0	49.95	3.4776
1864	TTA/GCT	52.0	50.84	3.4947	1865	TGT/TCT	52.0	52.13	3.5194	1866	TGG/GGT	52.0	51.86	3.5143
1867	GCA/TTT	52.0	50.24	3.4833	1868	GAT/GAA	52.0	51.12	3.5000	1869	TAA/GTA	52.0	52.55	3.5273
1870	AGT/GCC	52.0	52.96	3.5353	1871	TAT/GAG	52.0	52.35	3.5236	1872	CGC/TGG	52.0	52.97	3.5354
1873	TGC/AAT	52.0	52.03	3.5174	1874	TTT/AGT	52.0	51.94	3.5157	1875	GTA/TGT	52.0	50.98	3.4974
1876	ATT/TTT	52.0	52.78	3.5317	1877	GGA/TAA	52.0	51.51	3.5076	1878	GGC/ATT	52.0	51.60	3.5091
1879	TCT/GAG	52.0	51.64	3.5100	1880	AAT/GAA	51.9	51.30	3.5034	1881	TAA/ACA	51.9	51.18	3.5011
1882	TTA/ACA	51.9	50.74	3.4929	1883	GAA/TTA	51.9	53.06	3.5371	1884	ACG/CAC	51.9	50.92	3.4963
1885	GTA/ACC	51.9	51.80	3.5130	1886	CCG/CCC	51.9	52.64	3.5292	1887	TGC/GCC	51.9	52.17	3.5201
1888	GCC/AGC	51.9	52.50	3.5265	1889	CGA/TGC	51.9	49.44	3.4680	1890	GGG/GAG	51.9	51.17	3.5010
1891	GGT/GAG	51.9	50.62	3.4904	1892	TCG/TAG	51.9	50.54	3.4890	1893	CCC/ACG	51.9	52.84	3.5329
1894	ATC/CCG	51.9	50.44	3.4871	1895	CTA/AGG	51.9	52.55	3.5273	1896	CCC/ATG	51.9	53.21	3.5399
1897	AAA/GTG	51.9	53.66	3.5485	1898	TTA/GTG	51.9	52.23	3.5212	1899	TCG/AAT	51.9	51.37	3.5049
1900	CGA/CAT	51.9	50.84	3.4947	1901	ATT/GAT	51.9	52.64	3.5292	1902	GGG/GAT	51.9	51.21	3.5017
1903	CAA/ACT	51.9	50.94	3.4966	1904	TCG/ACT	51.9	51.04	3.4986	1905	GAC/GCT	51.9	50.23	3.4830
1906	CGA/CGT	51.9	52.18	3.5204	1907	GAG/GGT	51.9	52.31	3.5228	1908	GCT/TGT	51.9	53.26	3.5409
1909	GGA/GAC	51.9	51.11	3.4999	1910	GGA/TAC	51.9	51.14	3.5004	1911	TAT/TAG	51.9	51.76	3.5123
1912	TAG/TAT	51.9	51.86	3.5143	1913	TTG/TAT	51.9	52.76	3.5314	1914	TTG/ACT	51.9	50.51	3.4884
1915	GAT/GCA	51.8	50.44	3.4871	1916	CGT/CTA	51.8	50.57	3.4896	1917	GTA/GTG	51.8	52.08	3.5184
1918	CGA/TAT	51.8	50.86	3.4950	1919	CCT/AGT	51.8	51.96	3.5161	1920	TCG/ACA	51.8	50.06	3.4798
1921	ATG/TCA	51.8	52.87	3.5336	1922	CTT/AGA	51.8	50.90	3.4959	1923	GCG/ATA	51.8	52.11	3.5190
1924	AGT/CTA	51.8	51.08	3.4993	1925	ATT/GTA	51.8	51.23	3.5021	1926	GCA/ATC	51.8	51.71	3.5114
1927	TTA/ATC	51.8	50.74	3.4927	1928	CCC/TAG	51.8	52.94	3.5348	1929	ATT/TGG	51.8	53.94	3.5540
1930	AAG/ATG	51.8	51.62	3.5096	1931	CTA/ATG	51.8	51.61	3.5094	1932	CCC/TTG	51.8	52.02	3.5172
1933	GGT/TTG	51.8	51.45	3.5064	1934	GGG/TAT	51.8	51.71	3.5113	1935	ATA/GCT	51.8	49.26	3.4645
1936	TAA/TCT	51.8	51.27	3.5029	1937	TGC/TCT	51.8	50.83	3.4944	1938	TGG/GTT	51.8	51.71	3.5114
1939	TCA/TTT	51.8	50.32	3.4847	1940	TTG/ACG	51.8	50.70	3.4920	1941	TAA/AGC	51.8	51.21	3.5017
1942	TCT/ACG	51.8	50.19	3.4822	1943	TCA/CGG	51.8	52.19	3.5205	1944	GTG/TCT	51.8	50.65	3.4910
1945	TAA/AAC	51.7	51.33	3.5041	1946	AGA/GTG	51.7	53.47	3.5450	1947	TTG/ATG	51.7	51.51	3.5074
1948	TTC/AGT	51.7	50.52	3.4886	1949	AGT/AAA	51.7	50.51	3.4884	1950	CTG/AAA	51.7	51.15	3.5006
1951	GCT/TAA	51.7	50.90	3.4959	1952	GCG/ACA	51.7	53.96	3.5543	1953	AGT/CGA	51.7	49.87	3.4762
1954	AGG/CTA	51.7	52.41	3.5248	1955	TGT/GAC	51.7	52.05	3.5178	1956	GTT/CCC	51.7	53.00	3.5360
1957	GCG/GAG	51.7	50.86	3.4950	1958	TGG/TAG	51.7	51.54	3.5081	1959	GAA/GCG	51.7	52.21	3.5209
1960	CAC/TCG	51.7	52.51	3.5266	1961	AAA/GGG	51.7	51.92	3.5153	1962	GGT/GGG	51.7	51.92	3.5153
1963	AAA/TGG	51.7	54.24	3.5596	1964	GCG/GTG	51.7	50.49	3.4880	1965	GCG/ACT	51.7	52.46	3.5256
1966	GTT/ATC	51.7	51.97	3.5163	1967	TGA/GTC	51.7	50.56	3.4894	1968	GTA/TTG	51.7	52.11	3.5190
1969	CTG/ACT	51.7	51.24	3.5023	1970	ACA/TCT	51.7	52.64	3.5292	1971	CGA/TTT	51.7	50.56	3.4894
1972	TCA/GGC	51.6	52.89	3.5338	1973	TTG/GAG	51.6	51.77	3.5126	1974	TTG/TAG	51.6	51.57	3.5086
1975	TGT/CAA	51.6	50.07	3.4799	1976	GCT/GAA	51.6	51.44	3.5061	1977	GTT/TCA	51.6	50.56	3.4893
1978	CTA/AGA	51.6	49.55	3.4700	1979	CTC/AGA	51.6	50.75	3.4930	1980	TCG/CGA	51.6	52.97	3.5354
1981	TGA/GTA	51.6	52.16	3.5199	1982	TTT/GTA	51.6	51.64	3.5100	1983	TCA/AAC	51.6	50.79	3.4937
1984	GCC/CAC	51.6	53.09	3.5378	1985	AGA/ACC	51.6	51.38	3.5050	1986	AGC/CGC	51.6	53.09	3.5377
1987	ACA/GGC	51.6	53.01	3.5362	1988	CCG/CTC	51.6	53.29	3.5416	1989	GGT/GTC	51.6	49.20	3.4632
1990	CAT/ACG	51.6	52.03	3.5175	1991	CGT/CCG	51.6	52.37	3.5239	1992	ACC/TCG	51.6	55.09	3.5759
1993	GAA/TCG	51.6	52.80	3.5321	1994	AAG/AGG	51.6	50.74	3.4929	1995	CTG/AGG	51.6	50.16	3.4817
1996	CTA/ACT	51.6	50.27	3.4838	1997	GCT/ATT	51.6	51.49	3.5071	1998	GCC/CTT	51.6	52.32	3.5231
1999	GAT/GTT	51.6	52.16	3.5199	2000	GCA/TGA	51.6	52.53	3.5270	2001	TAC/AGC	51.6	50.06	3.4798
2002	AGA/ATC	51.6	51.39	3.5053	2003	AGA/CTC	51.6	50.66	3.4913	2004	TCT/CGG	51.6	52.59	3.5282
2005	AGT/GGG	51.6	51.28	3.5030	2006	TAT/TAT	51.6	51.71	3.5113	2007	GTC/ATT	51.6	51.83	3.5137

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
2008	TTT/ATT	51.6	50.96	3.4970	2009	GAG/TAT	51.6	52.94	3.5348	2010	TAC/ACA	51.5	49.23	3.4640
2011	GAT/TGA	51.5	51.28	3.5030	2012	CGT/TTA	51.5	49.94	3.4775	2013	GTA/GAC	51.5	52.12	3.5192
2014	GTT/GGG	51.5	51.53	3.5079	2015	AAA/CAT	51.5	50.16	3.4817	2016	GTG/GCT	51.5	51.16	3.5007
2017	AGG/GTT	51.5	51.12	3.5000	2018	CGT/AAA	51.5	49.66	3.4722	2019	GGA/GAA	51.5	51.30	3.5034
2020	TTA/GAA	51.5	51.90	3.5150	2021	TGT/TAA	51.5	50.70	3.4920	2022	TTA/TAA	51.5	51.69	3.5110
2023	GCG/GCA	51.5	53.16	3.5391	2024	ACC/GGA	51.5	52.39	3.5243	2025	TAG/GGA	51.5	50.82	3.4943
2026	CCT/TGA	51.5	50.77	3.4933	2027	TCA/ATA	51.5	50.47	3.4876	2028	TTC/ATA	51.5	50.27	3.4838
2029	GCC/CTA	51.5	52.81	3.5323	2030	ACT/TTA	51.5	53.59	3.5473	2031	GAC/TTA	51.5	51.91	3.5151
2032	TGC/GAC	51.5	50.56	3.4894	2033	TGT/TCC	51.5	51.68	3.5107	2034	TAT/AGC	51.5	50.41	3.4866
2035	TCT/GGC	51.5	52.34	3.5234	2036	GAC/ATC	51.5	50.35	3.4854	2037	GTC/ATC	51.5	51.40	3.5054
2038	TAG/GAG	51.5	51.77	3.5126	2039	CGA/CCG	51.5	52.29	3.5225	2040	GCT/TCG	51.5	49.82	3.4752
2041	CAG/AGG	51.5	51.36	3.5047	2042	CAT/AGG	51.5	51.13	3.5001	2043	CGA/CGG	51.5	52.81	3.5323
2044	CCG/TGG	51.5	49.60	3.4709	2045	GGT/TGG	51.5	50.55	3.4891	2046	AAT/CTG	51.5	51.52	3.5077
2047	ACA/TTG	51.5	53.39	3.5434	2048	GCA/TTG	51.5	51.19	3.5013	2049	CCC/GCT	51.5	52.32	3.5229
2050	CAG/TCT	51.5	50.07	3.4799	2051	CAT/CGT	51.5	51.74	3.5118	2052	AAG/GGT	51.5	51.58	3.5089
2053	ATG/GGT	51.5	50.54	3.4890	2054	TCG/TGT	51.5	51.92	3.5153	2055	CTA/ATT	51.5	50.77	3.4934
2056	TCG/ATT	51.5	50.72	3.4924	2057	TGT/ATT	51.5	51.33	3.5040	2058	GGC/GCA	51.5	52.66	3.5295
2059	TAA/TTA	51.5	50.94	3.4966	2060	CAA/TCT	51.5	50.02	3.4789	2061	GAT/TCT	51.5	50.61	3.4903
2062	TAA/GAA	51.4	51.33	3.5041	2063	GCA/ACA	51.4	51.33	3.5040	2064	AGT/GTC	51.4	48.36	3.4472
2065	CGA/ATG	51.4	51.64	3.5100	2066	AGG/CTG	51.4	50.11	3.4808	2067	CGA/CTG	51.4	50.93	3.4964
2068	GTC/GAT	51.4	51.63	3.5098	2069	TAT/GAT	51.4	51.76	3.5123	2070	CTC/AGT	51.4	50.08	3.4801
2071	TTT/ATG	51.4	51.33	3.5040	2072	GCT/AAC	51.4	52.45	3.5255	2073	TAG/GAA	51.4	51.66	3.5103
2074	GAA/TAA	51.4	51.87	3.5144	2075	TTA/GTA	51.4	50.86	3.4951	2076	GGG/TTA	51.4	51.15	3.5006
2077	TGC/CAC	51.4	51.20	3.5016	2078	AGT/TAC	51.4	51.57	3.5086	2079	CCC/GCC	51.4	52.03	3.5174
2080	TTC/AGC	51.4	51.05	3.4987	2081	AAA/CAG	51.4	50.42	3.4867	2082	ATA/ACG	51.4	50.81	3.4941
2083	GTA/GCG	51.4	51.54	3.5080	2084	TGT/GGG	51.4	52.32	3.5231	2085	TGG/TTG	51.4	51.27	3.5029
2086	TAC/AAT	51.4	50.74	3.4929	2087	TAA/CAT	51.4	50.41	3.4864	2088	GAC/TTT	51.4	52.17	3.5201
2089	CAA/ATG	51.4	50.56	3.4893	2090	ACT/TGC	51.4	54.82	3.5709	2091	CTG/TGC	51.4	54.31	3.5610
2092	AGT/TTC	51.4	51.80	3.5130	2093	AGT/GAG	51.4	51.35	3.5044	2094	CTC/CCG	51.4	51.46	3.5066
2095	AGG/TGG	51.4	53.35	3.5427	2096	TAT/CTG	51.4	50.96	3.4970	2097	GGC/GAA	51.3	51.77	3.5126
2098	GGC/GCT	51.3	51.74	3.5118	2099	TAC/GTA	51.3	51.39	3.5051	2100	CGG/TCG	51.3	53.34	3.5425
2101	TGA/CGT	51.3	51.15	3.5006	2102	CAT/AAA	51.3	50.28	3.4840	2103	ATA/GAA	51.3	52.77	3.5316
2104	GAA/GAA	51.3	52.03	3.5174	2105	GCC/ACA	51.3	50.21	3.4827	2106	TGA/CCA	51.3	50.67	3.4914
2107	CAT/AGA	51.3	51.44	3.5061	2108	AGG/GTA	51.3	49.75	3.4739	2109	ACG/ATC	51.3	52.91	3.5343
2110	AAG/GAG	51.3	51.01	3.4980	2111	AAT/GAG	51.3	51.13	3.5003	2112	TGT/TAG	51.3	51.11	3.4999
2113	AAA/TCG	51.3	54.50	3.5647	2114	AAG/CGG	51.3	51.13	3.5001	2115	GAT/GGG	51.3	51.70	3.5111
2116	CCT/TGG	51.3	50.29	3.4843	2117	CAT/ATG	51.3	50.89	3.4956	2118	AAG/CTG	51.3	51.03	3.4983
2119	TTA/TTG	51.3	51.66	3.5103	2120	AAG/GAT	51.3	51.32	3.5039	2121	GGT/TAT	51.3	51.17	3.5010
2122	CCA/ACT	51.3	50.07	3.4799	2123	AAG/GCT	51.3	50.71	3.4921	2124	GAC/TCT	51.3	49.96	3.4778
2125	AAT/GTT	51.3	52.41	3.5246	2126	GGG/GTT	51.3	51.54	3.5080	2127	TTT/AGC	51.3	50.72	3.4924
2128	AGG/GAG	51.3	49.92	3.4771	2129	AGG/GAT	51.3	51.02	3.4981	2130	GTC/ACT	51.3	50.66	3.4913
2131	GGA/TTA	51.2	50.45	3.4873	2132	GGC/TAC	51.2	51.04	3.4984	2133	CGC/CAG	51.2	52.71	3.5304
2134	TAA/CCG	51.2	50.38	3.4860	2135	TAA/CGG	51.2	49.86	3.4759	2136	CAA/TAT	51.2	50.41	3.4864
2137	GTC/GAA	51.2	52.12	3.5192	2138	CGT/CAC	51.2	51.00	3.4977	2139	TCC/GGC	51.2	51.32	3.5039
2140	CTC/TGG	51.2	52.78	3.5317	2141	TCA/GCT	51.2	50.38	3.4860	2142	CCG/CGT	51.2	52.13	3.5194
2143	AGG/TGT	51.2	53.60	3.5475	2144	ACA/GTT	51.2	50.45	3.4873	2145	ACT/TAA	51.2	52.92	3.5345
2146	GTT/GCA	51.2	51.00	3.4977	2147	ATT/AGA	51.2	50.86	3.4950	2148	CTG/AGA	51.2	49.99	3.4785
2149	GTT/TTA	51.2	51.39	3.5051	2150	TTT/TTA	51.2	51.09	3.4994	2151	ACG/AAC	51.2	52.61	3.5285
2152	GCC/AAC	51.2	51.92	3.5154	2153	CTC/GCC	51.2	52.55	3.5275	2154	GCC/GGC	51.2	52.20	3.5207
2155	GAA/TTC	51.2	52.24	3.5215	2156	GAT/TTC	51.2	52.18	3.5204	2157	CAA/AAG	51.2	51.54	3.5081
2158	GCT/GAG	51.2	50.79	3.4937	2159	CAG/ACG	51.2	51.78	3.5127	2160	AAA/GCG	51.2	52.54	3.5272
2161	GTG/GCG	51.2	50.70	3.4920	2162	CGT/TCG	51.2	52.64	3.5290	2163	CAA/CGG	51.2	50.59	3.4898

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
2164	TTA/CGG	51.2	50.14	3.4812	2165	ATA/GGG	51.2	53.07	3.5372	2166	GTG/GGG	51.2	51.24	3.5023
2167	TGG/GGG	51.2	51.31	3.5037	2168	CCC/CTG	51.2	51.80	3.5131	2169	ACA/GTG	51.2	52.30	3.5226
2170	ATA/CGT	51.2	49.99	3.4785	2171	CAG/CGT	51.2	50.95	3.4967	2172	TAA/CGT	51.2	51.68	3.5107
2173	CAA/AAT	51.2	51.30	3.5036	2174	GGC/TAA	51.1	51.74	3.5118	2175	TCT/TAG	51.1	50.08	3.4802
2176	GGG/GTG	51.1	51.60	3.5091	2177	AGT/ACT	51.1	50.74	3.4929	2178	TAC/GTT	51.1	51.65	3.5101
2179	TGG/TTT	51.1	51.06	3.4989	2180	GAG/GAA	51.1	51.94	3.5157	2181	GGG/GAA	51.1	51.33	3.5041
2182	TCG/GAA	51.1	51.14	3.5004	2183	GTG/GCA	51.1	50.61	3.4903	2184	GTG/TCA	51.1	50.22	3.4828
2185	AGT/AGA	51.1	50.14	3.4814	2186	TTT/GGA	51.1	51.55	3.5083	2187	GTT/GTA	51.1	51.52	3.5077
2188	GCT/TTA	51.1	50.64	3.4909	2189	TCT/AAC	51.1	49.89	3.4765	2190	AGA/GAC	51.1	49.14	3.4622
2191	AGA/CCC	51.1	50.66	3.4913	2192	GGC/GTC	51.1	49.17	3.4628	2193	ATT/TTC	51.1	51.66	3.5104
2194	ATT/AAG	51.1	51.63	3.5098	2195	AAG/TCG	51.1	53.26	3.5409	2196	CTA/CGG	51.1	51.30	3.5036
2197	ATG/AAT	51.1	51.63	3.5098	2198	TCT/AAT	51.1	50.74	3.4927	2199	TGG/CAT	51.1	50.71	3.4921
2200	TCT/GAT	51.1	50.45	3.4873	2201	ATG/ACT	51.1	50.77	3.4933	2202	AAG/ATT	51.1	51.25	3.5026
2203	TCA/CTT	51.1	49.32	3.4657	2204	CTA/TTT	51.1	49.92	3.4771	2205	GTA/GGA	51.1	51.22	3.5019
2206	TAA/GGA	51.1	50.22	3.4828	2207	GCA/ACC	51.1	51.52	3.5077	2208	ACT/GGC	51.1	52.47	3.5258
2209	TTT/ATC	51.1	50.08	3.4801	2210	TAA/GTC	51.1	51.72	3.5116	2211	GAG/GGG	51.1	51.26	3.5027
2212	GAG/GAT	51.1	52.38	3.5242	2213	AGG/CTT	51.1	51.13	3.5001	2214	TTA/CTT	51.0	49.53	3.4696
2215	TAC/ACT	51.0	48.83	3.4562	2216	CTA/TCT	51.0	49.28	3.4648	2217	AGA/GAA	51.0	50.76	3.4931
2218	AGC/TAA	51.0	53.59	3.5473	2219	TGA/TAA	51.0	50.82	3.4943	2220	GCC/CCA	51.0	52.31	3.5228
2221	ACC/TGA	51.0	54.76	3.5696	2222	TAG/CTA	51.0	50.80	3.4939	2223	TTG/GTA	51.0	50.51	3.4884
2224	TAT/AAC	51.0	50.47	3.4876	2225	TGA/CCC	51.0	50.50	3.4883	2226	CGT/TGC	51.0	48.90	3.4576
2227	TGC/GTC	51.0	51.04	3.4986	2228	ACC/AAG	51.0	52.06	3.5180	2229	CTA/AAG	51.0	51.15	3.5006
2230	ACA/TAG	51.0	52.67	3.5296	2231	GCG/TAG	51.0	50.09	3.4804	2232	AAT/AGG	51.0	51.39	3.5053
2233	AAT/GGG	51.0	51.25	3.5026	2234	TAG/GGG	51.0	51.22	3.5020	2235	AAT/TGG	51.0	53.78	3.5509
2236	ATG/TGG	51.0	54.08	3.5565	2237	ATA/GTG	51.0	51.37	3.5049	2238	TGT/GTG	51.0	50.91	3.4960
2239	AAG/AAT	51.0	51.42	3.5059	2240	TGT/CAT	51.0	50.17	3.4820	2241	CTA/CGT	51.0	50.83	3.4946
2242	GGG/GGT	51.0	51.41	3.5056	2243	TGC/ATT	51.0	49.16	3.4625	2244	ATA/CTT	51.0	49.94	3.4775
2245	GTC/GCA	51.0	48.79	3.4554	2246	GTA/GTA	51.0	50.58	3.4897	2247	TTT/GGG	51.0	51.30	3.5034
2248	TCT/TGG	51.0	51.39	3.5053	2249	TAT/ACT	51.0	50.27	3.4838	2250	CTG/AGT	51.0	50.94	3.4966
2251	AGT/TTT	51.0	52.18	3.5202	2252	GGC/GAC	51.0	50.76	3.4931	2253	CGG/AGG	51.0	50.95	3.4967
2254	ATT/TCT	51.0	51.63	3.5097	2255	TCT/ATT	51.0	50.08	3.4801	2256	TCA/ATC	51.0	49.89	3.4765
2257	TAT/GTC	51.0	51.66	3.5104	2258	TAT/GGG	51.0	51.64	3.5100	2259	TGG/TTA	50.9	51.20	3.5016
2260	TGC/TCC	50.9	50.48	3.4878	2261	TCC/AAA	50.9	50.16	3.4817	2262	GCA/GAA	50.9	50.56	3.4894
2263	GCT/TCA	50.9	49.74	3.4736	2264	GTC/TCA	50.9	48.47	3.4494	2265	TAG/TCA	50.9	49.48	3.4687
2266	CTT/ATA	50.9	50.31	3.4845	2267	AGA/CTA	50.9	49.57	3.4703	2268	TGT/CTA	50.9	50.40	3.4863
2269	GAA/GTA	50.9	51.88	3.5145	2270	TCT/TTA	50.9	50.02	3.4789	2271	AGT/CAC	50.9	49.72	3.4732
2272	GTT/TAC	50.9	52.30	3.5226	2273	TGT/TAC	50.9	50.14	3.4814	2274	TGA/GGC	50.9	50.67	3.4914
2275	TGC/GGC	50.9	50.21	3.4827	2276	TGT/GTC	50.9	49.48	3.4687	2277	AAC/CAG	50.9	52.18	3.5204
2278	GCT/TAG	50.9	50.92	3.4961	2279	TTT/ACG	50.9	49.15	3.4624	2280	ATA/CCG	50.9	50.01	3.4788
2281	GGG/GGG	50.9	50.78	3.4936	2282	TGA/TGG	50.9	49.82	3.4752	2283	ACC/ATG	50.9	50.94	3.4966
2284	TAA/CTG	50.9	50.63	3.4907	2285	AGG/GTG	50.9	50.66	3.4913	2286	CGT/CAT	50.9	50.08	3.4802
2287	ATC/GAT	50.9	51.41	3.5056	2288	TCG/GAT	50.9	51.05	3.4987	2289	GCC/CCT	50.9	52.12	3.5192
2290	CAG/ATT	50.9	50.00	3.4787	2291	TAT/TTT	50.9	51.23	3.5021	2292	TAA/GAC	50.9	50.47	3.4876
2293	GTC/GGA	50.8	50.76	3.4931	2294	TAA/ACC	50.8	50.15	3.4815	2295	AGT/ATC	50.8	48.01	3.4405
2296	TCA/TGG	50.8	51.01	3.4979	2297	CTG/AAT	50.8	51.18	3.5011	2298	CGG/AGT	50.8	50.96	3.4970
2299	TGG/GGA	50.8	51.19	3.5014	2300	TTG/GTT	50.8	50.79	3.4937	2301	AAA/AAA	50.8	50.14	3.4812
2302	CAG/AAA	50.8	50.09	3.4804	2303	AGG/CAA	50.8	49.77	3.4742	2304	TAT/CAA	50.8	49.29	3.4650
2305	TGG/CAA	50.8	50.06	3.4798	2306	TTG/CAA	50.8	50.43	3.4868	2307	AGG/GAA	50.8	50.08	3.4801
2308	AAA/TAA	50.8	52.78	3.5317	2309	GAC/TAA	50.8	50.87	3.4953	2310	CTG/ACA	50.8	49.20	3.4634
2311	TAT/TCA	50.8	48.92	3.4580	2312	CCG/CGA	50.8	51.99	3.5167	2313	GGG/GTA	50.8	50.56	3.4894
2314	GTT/AAC	50.8	52.67	3.5296	2315	TTA/GAC	50.8	51.01	3.4979	2316	GAA/ACC	50.8	52.08	3.5184
2317	GCC/CTC	50.8	52.24	3.5215	2318	ATA/TTC	50.8	52.50	3.5265	2319	GGA/TTC	50.8	50.90	3.4959

(continued on next page)



(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
2320	TAG/TAG	50.8	50.86	3.4951	2321	CGA/TCG	50.8	52.57	3.5278	2322	CGT/AGG	50.8	51.35	3.5044
2323	CTT/AGG	50.8	50.64	3.4909	2324	TCG/CGG	50.8	51.92	3.5154	2325	AAG/GGG	50.8	50.38	3.4860
2326	CAA/CTG	50.8	49.57	3.4705	2327	GCT/GTG	50.8	50.08	3.4802	2328	CAT/TTG	50.8	51.05	3.4987
2329	CCA/AAT	50.8	50.27	3.4838	2330	GAT/GAT	50.8	51.25	3.5024	2331	AAT/ATT	50.8	50.47	3.4877
2332	AAC/GTT	50.8	51.22	3.5020	2333	GGA/GTA	50.8	50.33	3.4850	2334	TAC/CAG	50.8	52.83	3.5327
2335	TAG/CTG	50.8	50.46	3.4874	2336	TAC/GGA	50.8	50.22	3.4828	2337	GTC/TAC	50.8	51.69	3.5108
2338	TCC/CCG	50.8	51.64	3.5100	2339	TCC/TCG	50.8	52.19	3.5205	2340	TCA/TCT	50.8	49.92	3.4771
2341	AGG/GGT	50.8	50.65	3.4910	2342	TTG/GGT	50.7	51.62	3.5096	2343	TTC/ACT	50.7	48.84	3.4564
2344	CAA/TGT	50.7	51.07	3.4991	2345	TGC/TAA	50.7	52.28	3.5222	2346	TGC/CCA	50.7	49.48	3.4687
2347	AAG/AAA	50.7	51.20	3.5016	2348	ATG/AAA	50.7	51.61	3.5094	2349	AAT/CAA	50.7	49.11	3.4615
2350	AAG/GAA	50.7	51.03	3.4983	2351	TGG/TAA	50.7	50.45	3.4873	2352	TCA/ACA	50.7	49.73	3.4735
2353	TTC/ACA	50.7	48.83	3.4562	2354	TAT/GCA	50.7	49.51	3.4693	2355	CGC/AGA	50.7	52.63	3.5289
2356	ATC/GGA	50.7	51.51	3.5076	2357	GAG/GGA	50.7	50.94	3.4966	2358	TGA/GGA	50.7	50.21	3.4827
2359	TTG/GGA	50.7	50.89	3.4957	2360	TGT/CAC	50.7	50.50	3.4881	2361	GGT/TTC	50.7	50.20	3.4824
2362	CTA/ACG	50.7	51.13	3.5001	2363	AAT/TCG	50.7	51.95	3.5160	2364	ACA/ATG	50.7	48.40	3.4480
2365	GGT/GTG	50.7	50.68	3.4917	2366	TCG/GTG	50.7	50.27	3.4838	2367	CAG/AAT	50.7	50.81	3.4941
2368	GCG/GAT	50.7	50.98	3.4974	2369	AAG/ACT	50.7	50.48	3.4878	2370	CAG/ACT	50.7	50.72	3.4924
2371	TTA/CCT	50.7	49.38	3.4668	2372	AAT/TCT	50.7	52.12	3.5192	2373	ATG/AGT	50.7	50.92	3.4961
2374	TAC/GGT	50.7	51.14	3.5004	2375	TAA/TGT	50.7	51.83	3.5137	2376	ATC/TTT	50.7	51.26	3.5027
2377	CCA/TTT	50.7	49.06	3.4606	2378	TAA/TAA	50.7	50.74	3.4929	2379	GCA/GTA	50.7	52.04	3.5177
2380	GAT/ACC	50.7	51.34	3.5043	2381	GTC/ACC	50.7	50.47	3.4876	2382	TTG/GGG	50.7	50.99	3.4976
2383	AGT/CTG	50.7	50.43	3.4868	2384	AGG/AAT	50.7	50.48	3.4878	2385	AGG/CAT	50.7	49.64	3.4717
2386	TTT/GAT	50.7	51.77	3.5126	2387	GTG/TTT	50.7	50.63	3.4907	2388	TAC/AAC	50.6	49.73	3.4735
2389	ATT/TGT	50.6	53.14	3.5386	2390	TCT/ATC	50.6	48.84	3.4564	2391	AGG/AAA	50.6	50.64	3.4909
2392	AGA/CAA	50.6	49.84	3.4756	2393	TTC/GAA	50.6	51.01	3.4979	2394	TAG/TAA	50.6	51.32	3.5039
2395	AGA/CCA	50.6	50.83	3.4944	2396	GCT/GCA	50.6	49.88	3.4764	2397	GTG/GGA	50.6	51.11	3.4999
2398	TTC/GGA	50.6	50.43	3.4868	2399	AGG/TGA	50.6	52.18	3.5202	2400	AGG/ATA	50.6	50.77	3.4934
2401	TGG/CTA	50.6	50.49	3.4880	2402	AGA/AAC	50.6	48.95	3.4585	2403	ACG/ACC	50.6	50.74	3.4927
2404	TTA/ACC	50.6	49.87	3.4762	2405	GCC/CCC	50.6	52.44	3.5252	2406	TGT/GGC	50.6	50.21	3.4827
2407	GCA/TGC	50.6	51.95	3.5160	2408	ACG/CTC	50.6	52.09	3.5187	2409	GAA/GTC	50.6	51.04	3.4984
2410	CCA/ACG	50.6	50.62	3.4904	2411	CAA/CCG	50.6	49.99	3.4784	2412	AGT/AGG	50.6	50.23	3.4831
2413	AAG/TGG	50.6	51.98	3.5164	2414	GAA/TGG	50.6	51.47	3.5067	2415	CCA/ATG	50.6	50.45	3.4873
2416	ACA/CTG	50.6	47.59	3.4325	2417	ATG/CAT	50.6	50.23	3.4830	2418	ACA/GAT	50.6	49.71	3.4730
2419	GCT/GAT	50.6	50.23	3.4830	2420	AAA/CCT	50.6	48.92	3.4579	2421	AGG/AGT	50.6	49.86	3.4759
2422	GAC/GGT	50.6	49.82	3.4752	2423	AAG/TGT	50.6	52.89	3.5338	2424	GAC/GTT	50.6	50.96	3.4970
2425	TAC/GAA	50.6	50.45	3.4873	2426	GCA/TAA	50.5	49.93	3.4774	2427	GTA/TTA	50.5	50.95	3.4969
2428	GCA/GAC	50.5	50.40	3.4863	2429	TGA/TTC	50.5	50.38	3.4860	2430	AGT/AAG	50.5	49.65	3.4719
2431	TCA/TAT	50.5	50.97	3.4971	2432	TAT/GGT	50.5	51.05	3.4987	2433	AGA/AAA	50.5	49.93	3.4774
2434	CAT/TAA	50.5	49.29	3.4651	2435	TCG/GCA	50.5	49.34	3.4660	2436	ATA/TCA	50.5	51.60	3.5093
2437	TAT/CGA	50.5	48.95	3.4585	2438	TCA/GTA	50.5	50.04	3.4794	2439	TCG/GTA	50.5	49.95	3.4776
2440	TAT/GAC	50.5	50.28	3.4840	2441	TCA/GAC	50.5	50.65	3.4910	2442	TCA/ACC	50.5	49.62	3.4713
2443	CGA/TCC	50.5	50.50	3.4881	2444	CGC/TGC	50.5	50.62	3.4904	2445	CAG/AAG	50.5	49.65	3.4719
2446	CCA/AAG	50.5	50.49	3.4880	2447	CTT/AAG	50.5	51.18	3.5011	2448	ATA/CAG	50.5	50.20	3.4825
2449	ATG/TCG	50.5	52.54	3.5272	2450	ACG/AGG	50.5	51.28	3.5031	2451	AAT/CGG	50.5	51.28	3.5030
2452	CAG/ATG	50.5	50.38	3.4860	2453	CAT/CTG	50.5	49.91	3.4769	2454	GCG/TTG	50.5	49.96	3.4779
2455	GGT/GAT	50.5	50.14	3.4812	2456	TAC/GAT	50.5	50.38	3.4860	2457	CAG/TAT	50.5	49.74	3.4736
2458	TGT/TAT	50.5	50.30	3.4844	2459	ATC/TCT	50.5	50.70	3.4920	2460	CAC/CGT	50.5	49.84	3.4756
2461	AAG/CTT	50.5	50.65	3.4911	2462	CTA/CTT	50.5	49.07	3.4608	2463	AGA/TTA	50.5	52.88	3.5337
2464	CCA/AGA	50.5	51.22	3.5019	2465	CAA/TTG	50.5	50.72	3.4924	2466	CAA/CAT	50.5	48.92	3.4580
2467	TTT/TAT	50.5	51.56	3.5084	2468	TTT/ACT	50.5	49.66	3.4720	2469	GAG/GCG	50.4	50.59	3.4900
2470	CTC/TCG	50.4	51.78	3.5127	2471	GAG/TCG	50.4	51.05	3.4987	2472	AGG/GGG	50.4	49.60	3.4710
2473	TCA/GAA	50.4	50.71	3.4921	2474	TCT/TAA	50.4	50.58	3.4897	2475	CGA/ACA	50.4	50.83	3.4944

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
2476	CCC/GCA	50.4	52.05	3.5178	2477	AAA/TCA	50.4	52.44	3.5253	2478	TTG/TCA	50.4	49.38	3.4667
2479	ACG/AGA	50.4	52.35	3.5235	2480	CTT/CGA	50.4	50.13	3.4811	2481	AGA/ATA	50.4	49.54	3.4697
2482	CAG/ATA	50.4	50.72	3.4924	2483	TCC/ATA	50.4	49.39	3.4670	2484	ATA/GTA	50.4	50.17	3.4820
2485	TGA/TTA	50.4	50.29	3.4841	2486	GAC/ACC	50.4	50.61	3.4903	2487	GCT/ATC	50.4	50.83	3.4944
2488	AAA/GTC	50.4	51.30	3.5034	2489	ACC/ACG	50.4	49.81	3.4751	2490	ATG/ACG	50.4	49.80	3.4748
2491	AAG/CCG	50.4	49.69	3.4726	2492	ACC/GCG	50.4	50.48	3.4878	2493	CAG/CGG	50.4	48.94	3.4583
2494	GTA/TGG	50.4	50.73	3.4926	2495	TCT/GTG	50.4	49.80	3.4748	2496	TGT/TTG	50.4	50.32	3.4847
2497	GAC/GAT	50.4	49.86	3.4759	2498	GCG/TCT	50.4	50.62	3.4904	2499	AAT/AGT	50.4	50.65	3.4911
2500	TGT/GGT	50.4	49.92	3.4771	2501	CCA/ATT	50.4	50.15	3.4815	2502	TGT/GTT	50.4	50.37	3.4857
2503	CAG/TTT	50.4	50.17	3.4818	2504	TAC/TTT	50.4	50.00	3.4787	2505	TTC/TAA	50.4	50.80	3.4939
2506	TAC/TAA	50.4	50.32	3.4847	2507	TGC/GAT	50.4	50.49	3.4880	2508	CTG/ACG	50.4	49.37	3.4666
2509	ACT/AGG	50.4	51.96	3.5161	2510	AGG/ATG	50.4	50.53	3.4887	2511	AGT/GTG	50.4	50.29	3.4843
2512	GTT/TTG	50.4	50.07	3.4799	2513	CGG/AAT	50.4	50.38	3.4858	2514	GTG/GTT	50.4	50.90	3.4959
2515	GGT/TTT	50.4	48.25	3.4451	2516	TCA/GTC	50.3	49.48	3.4687	2517	CTA/AAA	50.3	50.06	3.4798
2518	TTA/CAA	50.3	49.32	3.4655	2519	CGT/TAA	50.3	49.17	3.4628	2520	AAT/ACA	50.3	48.61	3.4520
2521	GAA/TCA	50.3	50.52	3.4886	2522	GCG/TCA	50.3	51.24	3.5023	2523	TTT/TCA	50.3	49.72	3.4733
2524	AAG/AGA	50.3	50.90	3.4959	2525	ACG/CGA	50.3	51.98	3.5164	2526	CTA/CGA	50.3	50.07	3.4799
2527	AAG/GGA	50.3	49.92	3.4771	2528	AGG/GGA	50.3	50.37	3.4857	2529	AAG/CTA	50.3	51.36	3.5046
2530	TCT/CTA	50.3	48.86	3.4567	2531	AAA/GTA	50.3	52.13	3.5194	2532	ATC/TTA	50.3	52.06	3.5180
2533	GTG/TTA	50.3	50.39	3.4861	2534	AAT/TAC	50.3	51.63	3.5098	2535	TTA/TAC	50.3	50.79	3.4937
2536	AGT/ACC	50.3	50.27	3.4838	2537	CCA/AGC	50.3	50.62	3.4904	2538	TTC/ATC	50.3	49.07	3.4608
2539	AAT/GTC	50.3	51.24	3.5023	2540	ATG/AAG	50.3	50.40	3.4863	2541	CAA/TAG	50.3	50.61	3.4903
2542	AAT/CCG	50.3	49.75	3.4739	2543	CCC/CCG	50.3	51.49	3.5071	2544	TAG/GCG	50.3	50.38	3.4858
2545	ATT/AGG	50.3	50.41	3.4864	2546	CAT/CGG	50.3	50.50	3.4883	2547	CGT/CGG	50.3	51.03	3.4983
2548	ATT/GGG	50.3	50.27	3.4838	2549	TTA/TGG	50.3	49.26	3.4644	2550	TGG/CTG	50.3	49.54	3.4697
2551	AAT/GAT	50.3	50.10	3.4805	2552	CAT/TAT	50.3	49.46	3.4683	2553	ATG/GCT	50.3	50.23	3.4830
2554	AAC/TGT	50.3	51.63	3.5098	2555	ATG/GTT	50.3	50.33	3.4850	2556	TCG/GTT	50.3	50.23	3.4831
2557	GGC/TTA	50.3	49.99	3.4784	2558	ATT/AAT	50.3	50.39	3.4861	2559	GAT/GGT	50.3	51.45	3.5063
2560	TAA/TAC	50.3	50.40	3.4863	2561	AGA/AGC	50.3	49.11	3.4615	2562	AGG/AAG	50.3	50.43	3.4868
2563	TGA/CAG	50.3	52.32	3.5229	2564	AGG/AGG	50.3	49.77	3.4742	2565	ACT/CGG	50.3	51.60	3.5091
2566	AAC/TAT	50.3	51.90	3.5150	2567	GTT/GGT	50.3	50.46	3.4874	2568	AGG/ATT	50.3	50.16	3.4817
2569	TTC/ATT	50.2	49.66	3.4720	2570	ATA/AAA	50.2	50.53	3.4887	2571	CGG/AAA	50.2	50.36	3.4855
2572	AAC/TAA	50.2	52.38	3.5242	2573	CGA/TCA	50.2	50.66	3.4913	2574	CGG/AGA	50.2	50.64	3.4909
2575	ATA/ATA	50.2	50.29	3.4843	2576	TGA/CTA	50.2	49.65	3.4719	2577	GAC/GTA	50.2	50.70	3.4920
2578	CTT/TTA	50.2	49.23	3.4638	2579	AGT/GAC	50.2	48.04	3.4411	2580	ATA/GAC	50.2	51.90	3.5150
2581	GCA/TAC	50.2	49.96	3.4779	2582	TAT/TAC	50.2	49.71	3.4730	2583	TAT/ACC	50.2	49.39	3.4670
2584	CAT/AAG	50.2	50.38	3.4860	2585	TAA/CAG	50.2	50.77	3.4933	2586	AAG/GCG	50.2	49.66	3.4720
2587	GTA/TCG	50.2	51.31	3.5037	2588	ACG/CGG	50.2	50.91	3.4960	2589	AGT/CGG	50.2	50.18	3.4821
2590	CGA/TTG	50.2	49.50	3.4692	2591	CTG/TAT	50.2	50.65	3.4910	2592	CAT/ACT	50.2	50.18	3.4821
2593	GCT/ACT	50.2	50.29	3.4841	2594	ATA/CCT	50.2	48.06	3.4415	2595	ATC/AGT	50.2	48.49	3.4498
2596	GAC/TGT	50.2	49.50	3.4692	2597	GAT/TAC	50.1	50.26	3.4837	2598	AGT/AGC	50.1	48.76	3.4550
2599	AGA/CGC	50.1	52.04	3.5177	2600	AGT/CTC	50.1	49.34	3.4660	2601	TAA/TTC	50.1	50.08	3.4801
2602	GTG/GTG	50.1	50.43	3.4868	2603	AGT/CCT	50.1	50.02	3.4789	2604	AAC/TCT	50.1	50.74	3.4929
2605	AGG/CGT	50.1	49.78	3.4745	2606	CGA/TGT	50.1	50.47	3.4876	2607	TTT/GTT	50.1	50.06	3.4798
2608	TAC/TTA	50.1	49.73	3.4735	2609	CAA/CCT	50.1	49.57	3.4705	2610	TCT/GTT	50.1	49.40	3.4671
2611	TAT/TTC	50.1	50.02	3.4789	2612	TAA/TCG	50.1	51.42	3.5059	2613	TTC/TAT	50.1	50.29	3.4841
2614	TTG/TTT	50.1	50.20	3.4824	2615	CCA/AAA	50.1	48.78	3.4553	2616	CGC/AAA	50.1	50.07	3.4799
2617	CAG/ACA	50.1	49.63	3.4716	2618	GAG/GCA	50.1	50.57	3.4896	2619	ATC/AGA	50.1	49.69	3.4726
2620	CAG/AGA	50.1	49.76	3.4741	2621	ATG/GGA	50.1	49.99	3.4785	2622	GGG/GGA	50.1	49.83	3.4753
2623	AGA/GTA	50.1	50.53	3.4888	2624	GCG/GTA	50.1	50.22	3.4828	2625	CAG/TTA	50.1	50.89	3.4956
2626	TTG/TTA	50.1	49.95	3.4776	2627	AGA/CAC	50.1	48.64	3.4525	2628	CGA/ATC	50.1	50.78	3.4936
2629	CGA/CTC	50.1	48.28	3.4457	2630	TGC/TTC	50.1	49.98	3.4782	2631	CGA/CAG	50.1	53.04	3.5367

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
2632	CAT/TAG	50.1	49.67	3.4723	2633	CTT/TAG	50.1	50.65	3.4910	2634	ATG/AGG	50.1	50.41	3.4864
2635	CAG/TTG	50.1	50.55	3.4891	2636	AAT/AAT	50.1	50.83	3.4944	2637	CAT/AAT	50.1	50.20	3.4824
2638	AAG/CAT	50.1	49.59	3.4707	2639	CCA/TAT	50.1	49.54	3.4699	2640	GAC/TAT	50.1	50.37	3.4857
2641	TAC/TAT	50.1	50.04	3.4794	2642	TAA/CCT	50.1	50.35	3.4854	2643	TGT/CCT	50.1	49.87	3.4761
2644	ACG/GCT	50.1	47.13	3.4237	2645	AAC/GGT	50.1	49.26	3.4644	2646	TGC/GGT	50.1	49.61	3.4712
2647	GCC/TGT	50.1	51.48	3.5069	2648	GCC/ATT	50.1	50.89	3.4956	2649	AAT/CTT	50.1	49.87	3.4761
2650	TGG/CTT	50.1	49.40	3.4671	2651	TAG/CAT	50.1	49.84	3.4756	2652	TAG/CTT	50.1	50.08	3.4801
2653	GTC/GAC	50.1	51.00	3.4977	2654	TCA/TTG	50.1	50.65	3.4910	2655	CGG/CAT	50.1	49.89	3.4765
2656	TCA/CAT	50.1	49.21	3.4635	2657	CGT/ACT	50.1	50.02	3.4789	2658	CCC/AGT	50.1	50.12	3.4810
2659	TTG/GTG	50.1	50.54	3.4890	2660	TTG/CAT	50.1	50.45	3.4873	2661	TTG/GCT	50.1	50.07	3.4799
2662	TTG/TCT	50.1	49.96	3.4778	2663	TTA/CGT	50.1	49.99	3.4784	2664	CCT/AAA	50.0	49.69	3.4726
2665	CGA/AAA	50.0	50.52	3.4886	2666	CGG/CAA	50.0	49.23	3.4640	2667	TGA/CAA	50.0	49.55	3.4700
2668	ATC/GAA	50.0	51.90	3.5150	2669	GCG/GAA	50.0	50.67	3.4914	2670	GCG/TAA	50.0	50.44	3.4871
2671	CGC/ACA	50.0	49.63	3.4716	2672	CAT/CGA	50.0	50.87	3.4953	2673	GAC/GGA	50.0	49.91	3.4769
2674	TGC/GGA	50.0	50.41	3.4864	2675	TTA/GGA	50.0	50.49	3.4880	2676	GTG/GTA	50.0	50.32	3.4848
2677	TTA/TTA	50.0	49.88	3.4764	2678	CTC/AGC	50.0	48.53	3.4505	2679	GGA/GGC	50.0	50.54	3.4890
2680	GGT/GGC	50.0	50.03	3.4792	2681	GAT/GTC	50.0	50.98	3.4973	2682	GAT/GCG	50.0	49.48	3.4687
2683	TCG/GCG	50.0	50.86	3.4951	2684	ATA/TCG	50.0	53.82	3.5516	2685	ATG/GGG	50.0	50.42	3.4867
2686	TTA/CTG	50.0	49.95	3.4776	2687	GCG/TAT	50.0	50.31	3.4845	2688	AAT/CGT	50.0	50.44	3.4870
2689	TCT/CGT	50.0	50.98	3.4973	2690	ATC/GGT	50.0	49.75	3.4739	2691	TAA/CAA	50.0	49.13	3.4619
2692	TAC/ACC	50.0	48.32	3.4465	2693	TGA/CTC	50.0	49.99	3.4784	2694	GTG/TTG	50.0	50.38	3.4860
2695	AGT/GAT	50.0	49.24	3.4641	2696	TTC/GAT	50.0	50.50	3.4883	2697	GTT/TCT	50.0	49.49	3.4689
2698	CGG/CGG	50.0	50.39	3.4861	2699	TAC/GTC	49.9	49.96	3.4778	2700	TAA/TGG	49.9	50.22	3.4828
2701	TGC/GTA	49.9	49.63	3.4715	2702	CAA/AAA	49.9	49.78	3.4743	2703	TAG/CAA	49.9	49.19	3.4631
2704	GAC/GAA	49.9	49.89	3.4765	2705	CTG/TAA	49.9	50.62	3.4906	2706	CAT/ACA	49.9	48.78	3.4553
2707	CTT/ACA	49.9	49.64	3.4717	2708	TAG/GCA	49.9	50.27	3.4838	2709	GAC/TCA	49.9	49.15	3.4624
2710	GCA/TCA	49.9	49.11	3.4615	2711	CGA/AGA	49.9	49.39	3.4670	2712	CGG/CGA	49.9	49.69	3.4728
2713	CTG/CGA	49.9	49.07	3.4609	2714	TGT/CGA	49.9	49.56	3.4702	2715	GAA/GGA	49.9	50.60	3.4901
2716	AAA/ATA	49.9	50.18	3.4821	2717	CGG/ATA	49.9	49.78	3.4745	2718	CTT/CTA	49.9	49.05	3.4605
2719	TTC/GTA	49.9	49.24	3.4641	2720	ATT/GAC	49.9	51.41	3.5056	2721	GTT/GAC	49.9	51.63	3.5098
2722	TCT/GAC	49.9	49.69	3.4728	2723	AAA/TAC	49.9	52.53	3.5270	2724	GAA/TAC	49.9	50.89	3.4957
2725	TCT/ACC	49.9	48.48	3.4496	2726	ACG/CCC	49.9	49.66	3.4722	2727	TGC/CCC	49.9	48.15	3.4433
2728	AAA/TCC	49.9	51.84	3.5138	2729	ATT/TCC	49.9	50.75	3.4930	2730	AGT/CGC	49.9	51.62	3.5096
2731	GTA/GTC	49.9	49.69	3.4726	2732	TGT/TTC	49.9	49.68	3.4725	2733	ACA/AAG	49.9	48.83	3.4562
2734	TTA/GCG	49.9	50.83	3.4946	2735	AGG/CGG	49.9	50.25	3.4834	2736	ATG/ATG	49.9	49.70	3.4729
2737	ACC/CTG	49.9	50.48	3.4878	2738	ACG/TTG	49.9	52.37	3.5239	2739	CCA/TCT	49.9	48.60	3.4518
2740	AAC/AGT	49.9	48.99	3.4593	2741	CGG/CGT	49.9	50.92	3.4961	2742	GTC/GGT	49.9	49.54	3.4699
2743	CCG/TGT	49.9	50.84	3.4947	2744	GGT/GTT	49.9	49.96	3.4778	2745	CGG/AAG	49.9	50.44	3.4871
2746	TGA/TGT	49.9	49.14	3.4622	2747	GTC/GTA	49.8	49.56	3.4702	2748	CGT/ACC	49.8	49.54	3.4699
2749	ATC/TTC	49.8	51.35	3.5044	2750	CTG/AAG	49.8	49.93	3.4772	2751	GTT/GCT	49.8	49.63	3.4715
2752	CTA/TAG	49.8	50.62	3.4906	2753	CCG/AAA	49.8	49.10	3.4614	2754	AAC/TCA	49.8	50.95	3.4969
2755	CGC/TCA	49.8	49.47	3.4684	2756	AAG/CGA	49.8	50.18	3.4821	2757	TCG/TGA	49.8	51.79	3.5128
2758	ATG/ATA	49.8	50.08	3.4802	2759	CTG/ATA	49.8	49.90	3.4768	2760	CGA/ACC	49.8	50.66	3.4913
2761	ATA/TCC	49.8	51.69	3.5108	2762	CAT/AGC	49.8	50.62	3.4906	2763	GCA/GTC	49.8	49.87	3.4762
2764	ACG/TAG	49.8	51.42	3.5059	2765	GAT/TCG	49.8	50.50	3.4881	2766	GTG/TCG	49.8	50.35	3.4854
2767	ATG/GTG	49.8	49.99	3.4785	2768	CTT/AAT	49.8	49.92	3.4771	2769	GCC/ACT	49.8	50.12	3.4810
2770	TCT/ACT	49.8	49.07	3.4608	2771	GGT/GGT	49.8	49.69	3.4726	2772	ATG/ATT	49.8	49.93	3.4774
2773	TAC/GAC	49.8	48.91	3.4577	2774	TTT/GGT	49.8	50.26	3.4837	2775	GCT/ACC	49.8	50.30	3.4844
2776	AGA/GGC	49.8	49.64	3.4717	2777	TCC/CAG	49.8	52.54	3.5272	2778	AGT/ATG	49.8	49.51	3.4693
2779	CGG/ATG	49.8	50.38	3.4858	2780	CGT/AGT	49.8	49.80	3.4748	2781	TCT/CAA	49.7	48.80	3.4557
2782	TCA/TAA	49.7	49.72	3.4732	2783	TCG/TAA	49.7	49.99	3.4784	2784	AAA/ACA	49.7	47.42	3.4293
2785	AAG/ACA	49.7	47.87	3.4379	2786	TCT/GCA	49.7	48.98	3.4592	2787	ATC/TCA	49.7	50.68	3.4916

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
2788	TCA/CGA	49.7	50.22	3.4828	2789	CGG/CTA	49.7	48.42	3.4485	2790	ATG/GTA	49.7	49.81	3.4751
2791	TCC/AAC	49.7	49.62	3.4713	2792	GAA/GAC	49.7	50.02	3.4789	2793	TCA/TAC	49.7	49.38	3.4667
2794	GAA/GCC	49.7	49.69	3.4726	2795	CGT/TCC	49.7	49.38	3.4667	2796	GTA/TCC	49.7	49.60	3.4709
2797	GCC/ATC	49.7	50.65	3.4911	2798	TTA/GTC	49.7	49.71	3.4730	2799	GTA/TTT	49.7	49.57	3.4705
2800	CGT/AAG	49.7	49.72	3.4733	2801	CCA/TAG	49.7	49.66	3.4722	2802	CCT/ACG	49.7	48.80	3.4557
2803	TTA/CCG	49.7	49.66	3.4722	2804	AAT/GCG	49.7	49.95	3.4776	2805	CCC/TCG	49.7	51.48	3.5070
2806	CTG/CGG	49.7	49.03	3.4601	2807	TCG/TGG	49.7	50.72	3.4924	2808	CAG/CTG	49.7	49.40	3.4671
2809	CTA/TTG	49.7	50.14	3.4812	2810	AAT/CAT	49.7	49.20	3.4634	2811	CTA/CCT	49.7	48.63	3.4524
2812	ATC/TGT	49.7	52.13	3.5194	2813	GAG/TGT	49.7	50.24	3.4833	2814	CAT/ATT	49.7	49.20	3.4632
2815	CCA/CTT	49.7	48.47	3.4494	2816	GCG/GTT	49.7	50.59	3.4900	2817	TAA/TCA	49.7	48.93	3.4582
2818	AGT/GGC	49.7	48.82	3.4560	2819	TAA/GGC	49.7	49.95	3.4776	2820	CGG/TAT	49.7	49.78	3.4743
2821	CCG/ACT	49.7	49.95	3.4776	2822	ACA/GCT	49.7	48.15	3.4433	2823	AGC/GCT	49.7	52.14	3.5195
2824	CGT/TCT	49.7	49.85	3.4758	2825	AGT/CTT	49.7	48.58	3.4515	2826	GTT/TTT	49.7	50.06	3.4798
2827	GGA/GGA	49.7	49.66	3.4720	2828	TTT/GTG	49.6	50.23	3.4830	2829	TCC/ACA	49.6	48.32	3.4465
2830	CAG/TCA	49.6	48.68	3.4534	2831	AGG/CGA	49.6	50.74	3.4927	2832	CTC/CGA	49.6	48.39	3.4479
2833	ATA/GGA	49.6	49.70	3.4729	2834	ATG/TGA	49.6	53.49	3.5454	2835	CTA/ATA	49.6	49.82	3.4752
2836	ATT/CTA	49.6	49.47	3.4686	2837	AGT/AAC	49.6	47.97	3.4398	2838	CGA/AAC	49.6	49.20	3.4632
2839	TTT/GAC	49.6	50.50	3.4883	2840	GTT/ACC	49.6	50.63	3.4907	2841	CGA/CCC	49.6	50.21	3.4827
2842	GTA/GCC	49.6	49.93	3.4774	2843	AAT/TCC	49.6	51.28	3.5031	2844	CAA/AGC	49.6	48.80	3.4557
2845	CCT/AGC	49.6	50.04	3.4794	2846	GGC/GGC	49.6	49.89	3.4765	2847	ACC/TGC	49.6	53.87	3.5526
2848	GAC/TTC	49.6	50.50	3.4881	2849	CCG/ACG	49.6	49.60	3.4709	2850	TGG/CGG	49.6	49.31	3.4654
2851	CTA/CTG	49.6	49.77	3.4742	2852	GCT/TTG	49.6	49.63	3.4716	2853	TCG/TAT	49.6	50.23	3.4830
2854	AAT/ACT	49.6	49.38	3.4668	2855	CAG/CCT	49.6	49.25	3.4643	2856	CTT/AGT	49.6	49.69	3.4726
2857	AAC/ATT	49.6	49.23	3.4638	2858	CAG/CTT	49.6	49.01	3.4596	2859	CAT/TTT	49.6	49.37	3.4666
2860	TAC/TAC	49.6	49.62	3.4713	2861	GTT/GCG	49.6	49.97	3.4781	2862	GTT/GTG	49.6	50.17	3.4820
2863	AGT/AAT	49.6	48.70	3.4538	2864	CTG/ATT	49.6	49.81	3.4751	2865	CCT/ATA	49.6	49.69	3.4728
2866	GGC/GGT	49.6	49.20	3.4634	2867	GGC/GTA	49.5	49.19	3.4631	2868	ATT/AGT	49.5	49.15	3.4624
2869	TAA/GCA	49.5	49.86	3.4759	2870	TAA/GCC	49.5	49.35	3.4663	2871	GAT/TCC	49.5	50.61	3.4903
2872	TGA/CGC	49.5	51.81	3.5133	2873	TCC/ATC	49.5	48.49	3.4498	2874	TCT/GTC	49.5	48.67	3.4531
2875	TTT/GTC	49.5	49.09	3.4612	2876	CCG/AAT	49.5	49.44	3.4680	2877	ATG/ACA	49.5	49.78	3.4745
2878	ATT/ACA	49.5	49.13	3.4619	2879	CGA/CCA	49.5	50.38	3.4858	2880	TCT/TCA	49.5	48.07	3.4418
2881	CGA/CTA	49.5	48.76	3.4549	2882	AGC/TAC	49.5	52.70	3.5302	2883	GAA/TCC	49.5	50.15	3.4815
2884	GCT/TGC	49.5	51.39	3.5051	2885	AAA/ATC	49.5	49.30	3.4653	2886	AGC/GTC	49.5	48.75	3.4547
2887	GGC/TTC	49.5	49.17	3.4627	2888	CAC/CAG	49.5	51.13	3.5003	2889	CAG/CCG	49.5	48.04	3.4411
2890	GGG/TGG	49.5	48.68	3.4534	2891	CCA/CTG	49.5	49.08	3.4611	2892	TCG/TTG	49.5	49.58	3.4706
2893	CAG/CAT	49.5	47.84	3.4373	2894	AAT/GCT	49.5	47.48	3.4305	2895	TGG/CGT	49.5	49.25	3.4643
2896	CAC/TGT	49.5	48.13	3.4428	2897	TAC/GGC	49.5	49.53	3.4696	2898	GGC/GGA	49.5	49.86	3.4759
2899	ATT/GGT	49.5	49.34	3.4660	2900	CGT/TGA	49.5	48.88	3.4572	2901	GAT/GAC	49.5	49.66	3.4720
2902	CTG/TCT	49.5	48.88	3.4572	2903	CGC/AGT	49.5	51.98	3.5164	2904	TTT/TTT	49.5	49.20	3.4632
2905	TCA/GCC	49.4	48.88	3.4572	2906	TAT/GCG	49.4	49.60	3.4710	2907	TCA/GCG	49.4	50.85	3.4949
2908	ATC/AAA	49.4	49.60	3.4710	2909	TGC/CAA	49.4	50.02	3.4791	2910	AAT/GCA	49.4	48.61	3.4521
2911	CTT/TCA	49.4	48.76	3.4549	2912	AGG/AGA	49.4	49.95	3.4776	2913	CAC/AGA	49.4	49.01	3.4598
2914	AGA/CGA	49.4	48.54	3.4507	2915	ATT/CGA	49.4	49.08	3.4611	2916	AAA/GAC	49.4	49.28	3.4648
2917	TTC/ACC	49.4	48.33	3.4467	2918	TTT/ACC	49.4	48.89	3.4575	2919	TGT/CCC	49.4	49.38	3.4668
2920	TGT/CGC	49.4	51.54	3.5080	2921	ACC/GGC	49.4	51.45	3.5064	2922	GTA/GGC	49.4	50.46	3.4874
2923	ATA/ATC	49.4	49.29	3.4651	2924	CAG/TAG	49.4	48.93	3.4582	2925	ATT/ATG	49.4	49.29	3.4650
2926	ACG/GTG	49.4	48.61	3.4520	2927	CCA/TTG	49.4	49.38	3.4668	2928	TCC/AAT	49.4	49.87	3.4762
2929	CCA/CAT	49.4	48.23	3.4447	2930	AAG/CCT	49.4	48.31	3.4463	2931	TCG/TCT	49.4	49.17	3.4627
2932	AAT/GGT	49.4	50.40	3.4863	2933	GGG/TGT	49.4	50.08	3.4801	2934	TCC/ATT	49.4	48.89	3.4575
2935	GCT/GAC	49.4	49.14	3.4622	2936	CTG/TAG	49.4	49.38	3.4668	2937	CGG/CTG	49.4	49.38	3.4668
2938	TGC/TAT	49.4	49.97	3.4781	2939	CGG/ATT	49.4	50.16	3.4817	2940	GTT/GTT	49.4	49.98	3.4782
2941	TTA/TGT	49.4	49.41	3.4674	2942	ATG/CAA	49.3	50.20	3.4825	2943	TTC/CAA	49.3	48.36	3.4473

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
2944	AAA/GAA	49.3	50.36	3.4855	2945	TAT/CCA	49.3	48.33	3.4466	2946	AGC/GCA	49.3	53.05	3.5370
2947	TTT/GCA	49.3	50.06	3.4798	2948	CAT/TCA	49.3	47.98	3.4399	2949	TGG/CGA	49.3	48.51	3.4501
2950	ACT/GTA	49.3	50.08	3.4802	2951	TGC/TTA	49.3	49.31	3.4654	2952	CAA/AAC	49.3	49.18	3.4630
2953	AGT/CCC	49.3	49.54	3.4699	2954	CAA/ATC	49.3	48.00	3.4404	2955	ATA/GTC	49.3	49.48	3.4687
2956	CCG/AAG	49.3	49.46	3.4683	2957	TAG/TCG	49.3	50.24	3.4833	2958	TGT/CTG	49.3	48.73	3.4544
2959	TCT/TTG	49.3	48.92	3.4579	2960	CCA/CCT	49.3	48.20	3.4443	2961	TGC/CCT	49.3	48.51	3.4501
2962	CAG/TGT	49.3	49.52	3.4694	2963	CGT/AAC	49.3	50.27	3.4838	2964	GAT/GCC	49.3	50.83	3.4944
2965	TCA/CGC	49.3	49.62	3.4713	2966	TAC/TTC	49.3	48.24	3.4450	2967	CTG/ATG	49.3	49.45	3.4681
2968	TCA/CTG	49.3	49.58	3.4706	2969	TAT/CAT	49.3	49.75	3.4738	2970	AGT/CGT	49.3	48.58	3.4514
2971	CCT/CGT	49.3	49.96	3.4778	2972	CGT/CGT	49.3	49.01	3.4598	2973	CTG/CGT	49.3	49.61	3.4712
2974	TTC/GGT	49.3	49.11	3.4615	2975	TAC/TCA	49.3	47.72	3.4351	2976	ATT/CAT	49.3	48.95	3.4585
2977	ATT/GTT	49.3	48.97	3.4589	2978	GCA/TTA	49.2	49.86	3.4759	2979	GTC/TTA	49.2	49.11	3.4615
2980	CGT/CCC	49.2	49.07	3.4609	2981	GTT/TCC	49.2	48.39	3.4478	2982	AAC/AAT	49.2	48.92	3.4579
2983	TAT/GCT	49.2	49.78	3.4745	2984	GTC/TCT	49.2	48.42	3.4485	2985	AGT/GTT	49.2	49.54	3.4697
2986	CCA/ACA	49.2	48.55	3.4508	2987	AAG/GCA	49.2	48.73	3.4544	2988	TTG/GCA	49.2	49.73	3.4735
2989	CGA/CGA	49.2	48.73	3.4544	2990	AGA/GGA	49.2	49.66	3.4720	2991	AAC/GTA	49.2	50.96	3.4970
2992	TCG/TTA	49.2	49.00	3.4595	2993	TTC/TAC	49.2	49.63	3.4716	2994	TTT/TAC	49.2	50.29	3.4841
2995	CGC/ACC	49.2	48.30	3.4462	2996	GCA/TCC	49.2	49.60	3.4710	2997	AAA/AGC	49.2	49.48	3.4687
2998	TAT/GGC	49.2	49.60	3.4710	2999	AAT/ATC	49.2	49.24	3.4641	3000	TGC/CTC	49.2	49.03	3.4601
3001	AGC/TTC	49.2	51.74	3.5120	3002	CGT/TAG	49.2	47.79	3.4363	3003	TAG/CCG	49.2	48.94	3.4583
3004	CGA/TGG	49.2	49.66	3.4720	3005	GAT/TGG	49.2	49.71	3.4730	3006	ATT/GTG	49.2	49.60	3.4709
3007	GCT/TAT	49.2	49.49	3.4689	3008	ACG/TCT	49.2	51.92	3.5153	3009	GCT/GTT	49.2	49.62	3.4713
3010	TCG/TTT	49.2	49.17	3.4628	3011	TGT/TTT	49.2	49.01	3.4598	3012	TAG/CGT	49.2	50.00	3.4787
3013	TAG/CTT	49.2	50.11	3.4808	3014	CGT/ATG	49.1	49.42	3.4676	3015	CGT/AAT	49.1	49.38	3.4668
3016	CCG/TCG	49.1	48.74	3.4546	3017	AGT/AGT	49.1	48.26	3.4453	3018	CGG/CTT	49.1	49.70	3.4729
3019	ACT/AGT	49.1	50.32	3.4848	3020	CAC/AAA	49.1	49.08	3.4611	3021	CAT/CAA	49.1	47.69	3.4344
3022	CAA/ACA	49.1	48.99	3.4593	3023	CCG/ACA	49.1	49.06	3.4606	3024	CAA/AGA	49.1	49.06	3.4606
3025	AAC/CGA	49.1	49.45	3.4681	3026	AAC/GGA	49.1	49.54	3.4699	3027	AAC/ATA	49.1	48.95	3.4586
3028	CGA/ATA	49.1	49.54	3.4699	3029	CAG/CTA	49.1	49.75	3.4738	3030	AGC/TTA	49.1	51.48	3.5069
3031	CGG/TTA	49.1	49.01	3.4598	3032	TTC/TTA	49.1	48.28	3.4457	3033	TTC/GAC	49.1	49.85	3.4758
3034	CGA/TAC	49.1	49.85	3.4758	3035	GAC/TAC	49.1	49.37	3.4666	3036	AAA/GCC	49.1	47.21	3.4254
3037	CAC/AGC	49.1	48.27	3.4456	3038	TTA/GGC	49.1	49.89	3.4765	3039	CGT/ATC	49.1	49.53	3.4696
3040	CAT/CCG	49.1	47.23	3.4256	3041	TTA/TCG	49.1	50.26	3.4835	3042	CTT/ATG	49.1	49.06	3.4606
3043	TCT/TAT	49.1	49.16	3.4625	3044	ATG/CGT	49.1	49.47	3.4686	3045	AAT/TGT	49.1	52.41	3.5248
3046	CAT/TGT	49.1	48.24	3.4450	3047	TGC/GTT	49.1	48.26	3.4453	3048	TTT/CTA	49.1	48.83	3.4562
3049	TAA/CTA	49.1	48.98	3.4591	3050	AGT/CAG	49.1	48.97	3.4589	3051	TAC/GCT	49.1	48.05	3.4414
3052	ATT/ATT	49.0	49.08	3.4611	3053	TCT/TTT	49.0	48.47	3.4494	3054	GGC/TAT	49.0	49.87	3.4761
3055	CTC/AAA	49.0	49.12	3.4618	3056	TCG/CAA	49.0	47.92	3.4389	3057	TCC/GAA	49.0	49.77	3.4742
3058	ATT/GCA	49.0	48.42	3.4483	3059	GAA/GCA	49.0	49.93	3.4772	3060	TCG/TCA	49.0	48.38	3.4476
3061	AGA/AGA	49.0	48.32	3.4465	3062	GCC/TGA	49.0	51.31	3.5037	3063	TAT/TGA	49.0	50.35	3.4854
3064	CAA/ATA	49.0	48.90	3.4576	3065	CCG/ATA	49.0	48.92	3.4579	3066	TCC/GTA	49.0	49.07	3.4609
3067	GCG/TTA	49.0	49.75	3.4739	3068	GAC/GAC	49.0	48.49	3.4498	3069	AAC/TAC	49.0	50.84	3.4947
3070	CAA/ACC	49.0	48.80	3.4557	3071	CCA/ACC	49.0	48.69	3.4536	3072	AGC/GCC	49.0	51.80	3.5131
3073	GCA/GCC	49.0	49.48	3.4687	3074	TAT/GCC	49.0	48.73	3.4544	3075	TTA/GCC	49.0	48.84	3.4564
3076	CAT/ATC	49.0	47.93	3.4390	3077	GAC/GTC	49.0	49.25	3.4643	3078	CCT/AAG	49.0	49.17	3.4627
3079	ACA/GAG	49.0	50.11	3.4807	3080	CTT/ACG	49.0	48.61	3.4521	3081	ATT/TCG	49.0	51.83	3.5137
3082	CAG/TCG	49.0	48.68	3.4534	3083	ACA/AAT	49.0	49.65	3.4719	3084	CTT/ACT	49.0	48.22	3.4446
3085	ATG/CCT	49.0	49.19	3.4631	3086	CTA/TGT	49.0	49.32	3.4657	3087	AAC/CTT	49.0	48.61	3.4520
3088	GTT/GCC	49.0	48.92	3.4580	3089	TAA/TCC	49.0	48.99	3.4593	3090	AGA/TGC	49.0	51.90	3.5150
3091	CCG/ATG	49.0	49.36	3.4664	3092	CGT/CTG	49.0	48.92	3.4579	3093	CTG/CAT	49.0	48.61	3.4520
3094	TCA/CCT	49.0	48.69	3.4536	3095	TAT/TCT	49.0	48.90	3.4576	3096	TAT/CTT	49.0	49.28	3.4648
3097	CGG/TTT	49.0	47.66	3.4340	3098	TAC/CAA	49.0	48.08	3.4420	3099	TAA/CAC	49.0	48.20	3.4441

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
3100	TCA/TTC	49.0	48.33	3.4466	3101	CGG/TAG	49.0	48.53	3.4505	3102	TCA/CCG	49.0	49.38	3.4667
3103	TTG/TTG	49.0	49.52	3.4694	3104	AAC/AAA	48.9	49.04	3.4604	3105	CGC/CCA	48.9	49.17	3.4627
3106	ACG/TCA	48.9	51.05	3.4987	3107	AAA/AGA	48.9	49.49	3.4689	3108	AAC/AGA	48.9	49.60	3.4710
3109	ATG/AGA	48.9	50.41	3.4866	3110	CCA/CGA	48.9	49.18	3.4630	3111	AAC/TGA	48.9	51.57	3.5087
3112	ATC/ATA	48.9	48.81	3.4559	3113	CAA/TTA	48.9	49.07	3.4608	3114	CCT/TTA	48.9	48.59	3.4517
3115	TCA/TTA	48.9	49.03	3.4601	3116	CCA/AAC	48.9	48.64	3.4525	3117	CGA/CAC	48.9	47.88	3.4382
3118	TTA/CAC	48.9	48.36	3.4473	3119	CGT/TAC	48.9	48.84	3.4564	3120	GAC/GCC	48.9	47.89	3.4383
3121	GAC/TCC	48.9	48.48	3.4495	3122	GTC/TCC	48.9	48.19	3.4440	3123	ATC/AGC	48.9	48.07	3.4417
3124	CTA/AGC	48.9	49.41	3.4673	3125	AAA/CGC	48.9	49.24	3.4641	3126	TTC/GGC	48.9	49.16	3.4625
3127	TAA/CTC	48.9	48.07	3.4418	3128	TGT/CTC	48.9	49.32	3.4655	3129	AAC/GTC	48.9	49.54	3.4697
3130	GTT/GTC	48.9	49.06	3.4606	3131	TTC/GTC	48.9	48.52	3.4504	3132	TTA/TTC	48.9	48.82	3.4560
3133	ACC/CAG	48.9	51.07	3.4991	3134	CCG/TAG	48.9	48.45	3.4491	3135	CCA/CCG	48.9	48.71	3.4540
3136	GTT/TCG	48.9	49.69	3.4728	3137	TGT/CGG	48.9	49.75	3.4739	3138	CAA/TGG	48.9	49.25	3.4643
3139	CCT/ATG	48.9	48.88	3.4572	3140	ACT/TTG	48.9	51.98	3.5165	3141	AAC/GAT	48.9	49.06	3.4606
3142	CTT/TAT	48.9	49.38	3.4667	3143	CAC/ACT	48.9	47.28	3.4265	3144	CGC/ACT	48.9	48.66	3.4530
3145	CGT/CTT	48.9	49.56	3.4702	3146	GCG/TTT	48.9	50.07	3.4799	3147	TAT/CCG	48.9	48.01	3.4406
3148	TTT/TTG	48.9	49.53	3.4696	3149	TAA/CCC	48.9	48.03	3.4409	3150	ACT/TAG	48.8	51.48	3.5070
3151	AGC/TAT	48.8	51.59	3.5090	3152	CCT/ACT	48.8	47.55	3.4318	3153	CGC/TCT	48.8	48.49	3.4498
3154	CCG/ATT	48.8	49.38	3.4668	3155	CTG/TTT	48.8	48.75	3.4547	3156	ATC/GTA	48.8	49.21	3.4635
3157	AAA/CAA	48.8	48.73	3.4543	3158	ATA/CAA	48.8	49.09	3.4612	3159	CTG/CAA	48.8	48.59	3.4517
3160	ACT/GAA	48.8	49.11	3.4617	3161	CCT/TAA	48.8	49.14	3.4622	3162	CCT/ACA	48.8	48.74	3.4546
3163	CTT/CCA	48.8	48.11	3.4425	3164	GAC/GCA	48.8	48.39	3.4479	3165	ACT/TCA	48.8	50.98	3.4973
3166	AAA/CGA	48.8	48.98	3.4591	3167	GAC/TGA	48.8	48.11	3.4425	3168	CTC/ATA	48.8	48.15	3.4433
3169	AAA/AAC	48.8	49.32	3.4657	3170	CTT/AAC	48.8	48.60	3.4518	3171	CGC/CCC	48.8	47.82	3.4370
3172	ATC/TCC	48.8	50.73	3.4926	3173	CCA/ATC	48.8	48.60	3.4518	3174	CTA/ATC	48.8	48.36	3.4473
3175	GTC/GTC	48.8	48.42	3.4485	3176	CGA/TTC	48.8	48.56	3.4511	3177	ATG/CTG	48.8	48.64	3.4525
3178	CAT/CAT	48.8	48.35	3.4470	3179	CAT/TCT	48.8	48.22	3.4446	3180	AAC/CGT	48.8	49.59	3.4707
3181	CAT/CTT	48.8	48.18	3.4438	3182	TAC/GCA	48.8	48.34	3.4469	3183	ACT/CGT	48.8	49.93	3.4774
3184	GTT/TTT	48.8	49.04	3.4602	3185	AGT/GGT	48.8	48.88	3.4572	3186	TAC/GCC	48.7	47.55	3.4318
3187	TCA/TCC	48.7	48.06	3.4415	3188	TCA/CAG	48.7	49.12	3.4618	3189	TTT/CAT	48.7	49.17	3.4628
3190	GGC/GAT	48.7	49.44	3.4680	3191	GGC/TTT	48.7	49.02	3.4599	3192	CCT/CAA	48.7	48.14	3.4431
3193	TAG/CCA	48.7	48.73	3.4544	3194	CCG/TCA	48.7	47.85	3.4376	3195	TCA/TCA	48.7	47.79	3.4364
3196	TTA/TCA	48.7	48.76	3.4550	3197	ATA/AGA	48.7	49.62	3.4713	3198	CCC/AGA	48.7	49.96	3.4778
3199	CAG/CGA	48.7	48.45	3.4491	3200	AAA/GGA	48.7	49.88	3.4764	3201	ATA/TGA	48.7	53.17	3.5392
3202	TTG/CTA	48.7	47.97	3.4398	3203	AAT/GAC	48.7	48.76	3.4549	3204	CTA/ACC	48.7	48.39	3.4479
3205	GCC/ACC	48.7	50.12	3.4810	3206	TCC/ACC	48.7	47.88	3.4382	3207	GTC/GCC	48.7	48.59	3.4517
3208	AAC/TCC	48.7	50.57	3.4896	3209	CCC/AGC	48.7	48.97	3.4589	3210	CCA/CGC	48.7	48.57	3.4512
3211	GTC/GGC	48.7	49.64	3.4717	3212	CAA/TTT	48.7	48.17	3.4435	3213	GCA/TTT	48.7	49.20	3.4634
3214	ACA/ACG	48.7	47.50	3.4309	3215	ATT/ACG	48.7	48.90	3.4576	3216	ATA/GCG	48.7	49.70	3.4729
3217	CTT/CGG	48.7	49.21	3.4635	3218	ACG/ATG	48.7	49.08	3.4611	3219	TAC/CAT	48.7	48.22	3.4446
3220	ACG/TAT	48.7	51.74	3.5120	3221	TCC/ACT	48.7	48.33	3.4467	3222	TCT/GCT	48.7	47.81	3.4367
3223	CTT/ATT	48.7	48.62	3.4523	3224	ATG/CTT	48.7	48.80	3.4557	3225	ATT/ACT	48.7	46.79	3.4173
3226	TCT/TTT	48.7	47.69	3.4345	3227	CCT/AAT	48.7	48.24	3.4450	3228	GTC/GCT	48.7	48.76	3.4550
3229	TTT/GCT	48.7	48.84	3.4564	3230	TAC/TGT	48.7	47.44	3.4296	3231	GTC/GTT	48.7	48.67	3.4531
3232	TAC/TCT	48.6	47.40	3.4290	3233	AAG/CAA	48.6	48.92	3.4579	3234	CAG/CAA	48.6	47.28	3.4265
3235	TCA/CAA	48.6	47.63	3.4334	3236	GCC/GAA	48.6	49.70	3.4729	3237	CGG/TAA	48.6	49.09	3.4612
3238	CTA/TAA	48.6	49.51	3.4693	3239	GCC/TAA	48.6	49.07	3.4608	3240	CAC/ACA	48.6	47.76	3.4357
3241	CTA/ACA	48.6	48.29	3.4459	3242	GCA/GCA	48.6	48.86	3.4567	3243	AAG/TGA	48.6	52.10	3.5188
3244	AAA/CTA	48.6	49.57	3.4703	3245	ATA/CTA	48.6	49.07	3.4609	3246	CAT/AAC	48.6	48.68	3.4534
3247	CGC/AAC	48.6	47.80	3.4366	3248	TCC/GAC	48.6	49.61	3.4712	3249	CGC/TAC	48.6	48.70	3.4538
3250	TTA/CCC	48.6	47.66	3.4340	3251	ACA/AGC	48.6	48.95	3.4585	3252	GAA/GGC	48.6	50.00	3.4787
3253	GAC/GGC	48.6	48.98	3.4591	3254	GTT/GGC	48.6	49.92	3.4771	3255	AAA/CTC	48.6	48.68	3.4534

(continued on next page)

(S1 continued) Colours: Single mismatches , double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
3256	CAT/TTC	48.6	48.11	3.4424	3257	CCT/TAG	48.6	48.35	3.4470	3258	ACC/CCG	48.6	48.42	3.4485
3259	TAG/CGG	48.6	48.67	3.4533	3260	ATC/AAT	48.6	49.08	3.4611	3261	CAC/AAT	48.6	48.83	3.4563
3262	ACA/CAT	48.6	47.77	3.4360	3263	TCG/CAT	48.6	48.04	3.4412	3264	CGT/TAT	48.6	49.10	3.4614
3265	GCT/GCT	48.6	48.14	3.4431	3266	GCT/TCT	48.6	48.26	3.4454	3267	AGT/TGT	48.6	52.11	3.5190
3268	GTG/TGT	48.6	49.41	3.4673	3269	AGT/ATT	48.6	49.06	3.4606	3270	TTC/GTT	48.6	48.76	3.4550
3271	TGC/TTT	48.6	48.72	3.4541	3272	TAG/TGT	48.5	49.58	3.4706	3273	CCA/ATA	48.5	49.15	3.4624
3274	TAC/CTA	48.5	47.72	3.4350	3275	TCT/GCG	48.5	49.20	3.4634	3276	GAG/TGG	48.5	49.16	3.4625
3277	AAC/ACT	48.5	47.84	3.4373	3278	CGT/CTT	48.5	47.96	3.4396	3279	CAG/TAA	48.5	49.03	3.4601
3280	AAT/CCA	48.5	46.69	3.4153	3281	TCT/CCA	48.5	47.47	3.4302	3282	CAC/CGA	48.5	47.70	3.4347
3283	GTT/TGA	48.5	49.25	3.4643	3284	CTA/TAC	48.5	48.57	3.4512	3285	TCT/TAC	48.5	48.61	3.4520
3286	AAA/ACC	48.5	48.61	3.4520	3287	AAT/GCC	48.5	48.60	3.4518	3288	CAA/TCC	48.5	47.94	3.4392
3289	CGC/TCC	48.5	48.14	3.4431	3290	ATA/AGC	48.5	49.06	3.4606	3291	ACA/CGC	48.5	48.55	3.4508
3292	AGC/ATC	48.5	47.95	3.4393	3293	CGT/CTC	48.5	47.18	3.4248	3294	CGT/TTC	48.5	48.59	3.4517
3295	TTA/CAG	48.5	50.43	3.4868	3296	CTA/CCG	48.5	49.08	3.4611	3297	ACG/TTT	48.5	52.18	3.5204
3298	TAC/CTT	48.5	48.00	3.4404	3299	TAT/CGG	48.5	49.29	3.4650	3300	TTG/CCT	48.5	48.96	3.4588
3301	TTT/TCCT	48.5	48.33	3.4466	3302	TTG/CTT	48.5	48.68	3.4534	3303	TTT/TTT	48.5	48.31	3.4463
3304	TTG/GCG	48.5	49.78	3.4745	3305	CTG/CCT	48.5	48.26	3.4454	3306	ATT/GCT	48.5	47.02	3.4217
3307	CGA/CAA	48.4	48.39	3.4479	3308	TCC/TAA	48.4	48.66	3.4530	3309	TTG/CCA	48.4	48.45	3.4491
3310	CCT/TCA	48.4	47.38	3.4286	3311	CTG/TCA	48.4	48.27	3.4456	3312	ACA/AGA	48.4	49.56	3.4702
3313	CAA/CGA	48.4	47.92	3.4388	3314	CAC/ATA	48.4	47.63	3.4334	3315	ATA/AAC	48.4	49.60	3.4710
3316	ATC/GAC	48.4	50.78	3.4936	3317	TCT/GCC	48.4	47.73	3.4353	3318	TTA/TCC	48.4	48.48	3.4496
3319	AAA/GGC	48.4	49.26	3.4645	3320	AAT/CTC	48.4	48.62	3.4523	3321	ATT/GTC	48.4	48.55	3.4509
3322	GCT/GTC	48.4	48.73	3.4543	3323	ACG/GAG	48.4	48.49	3.4498	3324	ATT/CGG	48.4	49.17	3.4627
3325	ATT/CTG	48.4	48.03	3.4409	3326	TCC/GAT	48.4	49.90	3.4766	3327	CTT/CGT	48.4	48.31	3.4463
3328	TCC/GTC	48.4	48.32	3.4465	3329	CCG/CTG	48.4	48.04	3.4412	3330	CCG/TAT	48.4	48.60	3.4518
3331	AAC/GCT	48.4	48.04	3.4411	3332	CGT/ATT	48.4	48.51	3.4502	3333	GTC/TTT	48.4	48.71	3.4540
3334	TAC/CAC	48.4	47.83	3.4372	3335	ATC/CAA	48.3	48.13	3.4428	3336	CGC/CAA	48.3	48.38	3.4476
3337	CGA/TAA	48.3	48.47	3.4494	3338	AGC/ACA	48.3	50.36	3.4855	3339	CTC/ACA	48.3	47.21	3.4254
3340	ATT/CCA	48.3	47.39	3.4287	3341	CAT/CCA	48.3	47.32	3.4274	3342	TTT/CCA	48.3	48.86	3.4569
3343	ATG/GCA	48.3	48.11	3.4425	3344	TTA/GCA	48.3	48.80	3.4556	3345	TTC/TCA	48.3	47.40	3.4289
3346	TAG/CGA	48.3	48.01	3.4405	3347	TGA/CGA	48.3	48.13	3.4428	3348	TGC/CTA	48.3	47.21	3.4254
3349	CTG/TTA	48.3	48.16	3.4434	3350	CGC/CAC	48.3	46.47	3.4112	3351	CAA/TAC	48.3	48.11	3.4424
3352	CAT/TAC	48.3	47.78	3.4361	3353	ATA/GCC	48.3	47.34	3.4278	3354	TAT/TCC	48.3	48.17	3.4437
3355	AAC/AGC	48.3	47.70	3.4347	3356	CTT/AGC	48.3	49.16	3.4625	3357	TCT/CGC	48.3	49.03	3.4601
3358	CGC/ATC	48.3	47.82	3.4370	3359	TAT/CTC	48.3	48.01	3.4405	3360	TTC/TTT	48.3	47.83	3.4372
3361	ACA/TCG	48.3	52.65	3.5293	3362	CTA/TGG	48.3	49.45	3.4681	3363	GCC/GAT	48.3	49.11	3.4617
3364	TCC/CGT	48.3	49.12	3.4618	3365	TCT/TGT	48.3	49.74	3.4736	3366	TGG/TGT	48.3	46.85	3.4183
3367	CAC/ATT	48.3	47.92	3.4388	3368	TCC/GTT	48.3	48.69	3.4536	3369	GCT/TTT	48.3	49.26	3.4645
3370	TAA/CCA	48.3	48.23	3.4447	3371	TTT/GGC	48.3	49.58	3.4706	3372	GTT/TGG	48.3	49.06	3.4606
3373	CCT/TTG	48.3	47.48	3.4305	3374	CGT/TTG	48.3	46.96	3.4205	3375	ACA/ATT	48.3	49.04	3.4604
3376	ACA/CTT	48.3	47.50	3.4309	3377	TAC/TCC	48.3	47.14	3.4239	3378	ATT/CTT	48.3	48.08	3.4420
3379	GGC/GTT	48.3	48.11	3.4425	3380	AAC/CAA	48.2	47.83	3.4372	3381	CTA/CAA	48.2	47.42	3.4293
3382	ACG/TAA	48.2	51.46	3.5066	3383	CAA/TAA	48.2	48.88	3.4572	3384	ATA/ACA	48.2	47.02	3.4216
3385	TCG/CCA	48.2	47.72	3.4351	3386	ACG/GCA	48.2	46.42	3.4101	3387	GCC/TCA	48.2	48.29	3.4460
3388	ACA/CGA	48.2	49.17	3.4627	3389	ATC/CGA	48.2	48.73	3.4543	3390	CGC/ATA	48.2	47.95	3.4393
3391	CTT/ACC	48.2	47.34	3.4277	3392	AAT/AGC	48.2	48.78	3.4553	3393	CAA/CGC	48.2	47.79	3.4364
3394	CAT/CGC	48.2	49.32	3.4657	3395	ATA/GGC	48.2	49.20	3.4634	3396	AAC/ATC	48.2	47.44	3.4297
3397	CAA/CTC	48.2	46.95	3.4204	3398	AAT/CAG	48.2	49.15	3.4624	3399	ACA/CAG	48.2	48.02	3.4408
3400	ACA/CCG	48.2	45.77	3.3977	3401	TCT/CCG	48.2	47.59	3.4325	3402	CAA/TCG	48.2	50.33	3.4850
3403	ACG/CTG	48.2	46.40	3.4097	3404	TCG/CTG	48.2	48.50	3.4499	3405	CTG/CTT	48.2	48.19	3.4440
3406	TGT/CTT	48.2	47.88	3.4382	3407	ATC/GTT	48.2	48.42	3.4483	3408	TGC/CAT	48.2	48.08	3.4420
3409	CTA/AAC	48.2	49.12	3.4618	3410	TTT/GCC	48.2	47.89	3.4383	3411	AGT/TGC	48.2	52.14	3.5195

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
3412	ACA/ACT	48.2	47.25	3.4261	3413	CCG/CCT	48.2	48.37	3.4475	3414	CCC/CGT	48.2	48.05	3.4414
3415	CCG/TTT	48.2	48.04	3.4411	3416	CCG/TAA	48.1	48.48	3.4495	3417	AAA/CCA	48.1	46.52	3.4120
3418	AAG/CCA	48.1	47.27	3.4264	3419	CTG/CCA	48.1	47.76	3.4358	3420	TCA/GCA	48.1	48.61	3.4521
3421	ATG/CTA	48.1	49.11	3.4617	3422	CCT/CTA	48.1	48.56	3.4511	3423	GCC/GTA	48.1	49.45	3.4681
3424	CTA/TTA	48.1	48.41	3.4482	3425	ATT/AAC	48.1	49.08	3.4611	3426	TCA/CAC	48.1	47.44	3.4296
3427	CCA/TAC	48.1	48.04	3.4412	3428	AAT/ACC	48.1	48.55	3.4509	3429	GCT/GCC	48.1	48.24	3.4450
3430	CCA/TCC	48.1	47.52	3.4312	3431	GCT/TCC	48.1	48.50	3.4499	3432	CCT/CGC	48.1	47.96	3.4396
3433	GAT/GGC	48.1	49.55	3.4700	3434	CTT/ATC	48.1	47.88	3.4382	3435	CCA/TTC	48.1	47.28	3.4265
3436	GTC/TTC	48.1	48.43	3.4486	3437	TAG/CAG	48.1	48.80	3.4556	3438	CCG/CCG	48.1	48.13	3.4428
3439	TCG/CCG	48.1	48.27	3.4456	3440	TAT/TCG	48.1	49.15	3.4624	3441	ATG/CGG	48.1	48.26	3.4454
3442	CAG/TGG	48.1	48.21	3.4444	3443	TCT/CTG	48.1	47.76	3.4358	3444	ATC/CAT	48.1	47.60	3.4326
3445	AAT/CCT	48.1	47.84	3.4373	3446	CAT/CCT	48.1	47.52	3.4312	3447	TCG/CTT	48.1	48.32	3.4465
3448	GCT/TAC	48.1	48.89	3.4573	3449	TAC/TGA	48.1	47.30	3.4270	3450	TTG/TCG	48.1	49.32	3.4657
3451	CCT/CTG	48.1	47.44	3.4297	3452	CCG/TTG	48.1	48.25	3.4451	3453	CGG/TTG	48.1	47.70	3.4347
3454	CCT/ATT	48.1	48.26	3.4454	3455	TTC/GCT	48.1	47.94	3.4392	3456	TTG/CGT	48.1	48.67	3.4533
3457	TTC/TTT	48.1	48.16	3.4434	3458	CTC/TAA	48.0	48.57	3.4512	3459	AAA/GCA	48.0	47.79	3.4364
3460	TCC/CGA	48.0	48.95	3.4586	3461	CCG/TGA	48.0	50.70	3.4920	3462	TGT/TGA	48.0	47.41	3.4291
3463	AAC/CTA	48.0	48.33	3.4466	3464	TTA/CTA	48.0	47.97	3.4398	3465	ACA/TTA	48.0	51.92	3.5153
3466	CGA/TTA	48.0	48.30	3.4462	3467	AAT/AAC	48.0	48.61	3.4521	3468	TCA/CCC	48.0	47.36	3.4281
3469	CAC/ATC	48.0	46.10	3.4041	3470	CCT/ATC	48.0	47.75	3.4356	3471	CTA/TTC	48.0	47.62	3.4331
3472	ATG/CCG	48.0	46.98	3.4208	3473	ATG/GCG	48.0	48.07	3.4417	3474	ACT/GTG	48.0	47.96	3.4396
3475	TCG/CCT	48.0	48.67	3.4533	3476	CAC/TTT	48.0	48.09	3.4421	3477	CTG/CTG	48.0	48.01	3.4406
3478	CTG/TTG	48.0	48.23	3.4449	3479	CCG/CAT	48.0	47.33	3.4275	3480	CCT/TAT	48.0	47.53	3.4315
3481	AGC/AAA	47.9	49.84	3.4756	3482	CGC/TAA	47.9	47.82	3.4370	3483	AAC/ACA	47.9	47.49	3.4306
3484	TAC/CGA	47.9	47.12	3.4235	3485	TTT/CGA	47.9	48.98	3.4592	3486	GGG/TGA	47.9	48.28	3.4457
3487	TCA/TGA	47.9	48.98	3.4591	3488	TCC/TTA	47.9	47.85	3.4376	3489	CTC/AAC	47.9	47.92	3.4388
3490	AAA/CAC	47.9	47.93	3.4390	3491	TAT/CAC	47.9	47.87	3.4379	3492	TTT/CAC	47.9	47.83	3.4372
3493	CAT/ACC	47.9	47.94	3.4392	3494	CCA/CCC	47.9	47.07	3.4226	3495	CTA/TCC	47.9	47.53	3.4315
3496	CAC/CGC	47.9	46.73	3.4161	3497	ATC/GGC	47.9	48.19	3.4440	3498	AAC/TGC	47.9	50.47	3.4876
3499	ATT/CAG	47.9	50.23	3.4830	3500	TGT/CAG	47.9	48.76	3.4550	3501	TCA/TCG	47.9	49.87	3.4761
3502	CTC/AAT	47.9	48.60	3.4518	3503	AAC/CAT	47.9	47.45	3.4299	3504	CTC/ACT	47.9	47.39	3.4287
3505	CTT/TCT	47.9	47.18	3.4246	3506	TGT/CGT	47.9	47.66	3.4338	3507	CTT/TTT	47.9	47.79	3.4363
3508	ATT/CGT	47.9	47.72	3.4350	3509	CTC/ATC	47.8	47.16	3.4243	3510	AGC/ACT	47.8	49.39	3.4670
3511	CGC/CCT	47.8	48.18	3.4438	3512	CCT/TGT	47.8	48.60	3.4518	3513	AAC/GAA	47.8	49.04	3.4604
3514	TTA/CCA	47.8	47.70	3.4347	3515	TCG/CTA	47.8	48.00	3.4404	3516	TTC/CAC	47.8	47.14	3.4239
3517	AAC/GAC	47.8	47.82	3.4369	3518	GCC/GAC	47.8	49.05	3.4605	3519	GCC/TAC	47.8	48.37	3.4475
3520	CAA/CCC	47.8	47.06	3.4224	3521	TTC/GCC	47.8	47.53	3.4315	3522	TCT/TCC	47.8	46.69	3.4153
3523	ATT/ATC	47.8	48.42	3.4485	3524	CGC/CTC	47.8	47.36	3.4281	3525	TTA/CTC	47.8	47.37	3.4284
3526	CCC/CAG	47.8	51.69	3.5108	3527	CGT/CAG	47.8	49.11	3.4615	3528	CCA/TCG	47.8	49.50	3.4692
3529	CAT/TGG	47.8	48.79	3.4554	3530	GTG/TGG	47.8	48.72	3.4541	3531	CTT/CTG	47.8	47.42	3.4293
3532	CTT/TTG	47.8	47.96	3.4396	3533	TCT/CAT	47.8	47.03	3.4218	3534	ATC/ACT	47.8	45.83	3.3990
3535	CAC/TCT	47.8	46.30	3.4078	3536	GCC/TCT	47.8	48.20	3.4443	3537	TCT/TCT	47.8	46.81	3.4176
3538	TTG/CTG	47.8	47.98	3.4401	3539	TTT/CTG	47.8	47.89	3.4383	3540	TTC/CAT	47.8	47.83	3.4372
3541	TTC/TCT	47.8	47.49	3.4306	3542	TTG/CCG	47.8	48.58	3.4514	3543	TAT/CCT	47.8	48.44	3.4488
3544	AGA/TGA	47.7	52.35	3.5235	3545	CCC/AAA	47.7	47.98	3.4401	3546	CAA/CAA	47.7	47.18	3.4246
3547	ACA/TAA	47.7	51.27	3.5029	3548	CCG/CCA	47.7	47.35	3.4280	3549	TTC/GCA	47.7	47.69	3.4344
3550	ATC/TGA	47.7	52.60	3.5283	3551	CTG/CTA	47.7	47.66	3.4338	3552	ACA/GTA	47.7	47.86	3.4377
3553	ACG/TTA	47.7	51.86	3.5141	3554	CCG/TTA	47.7	47.79	3.4364	3555	CAC/AAC	47.7	47.82	3.4370
3556	TCT/CAC	47.7	46.59	3.4135	3557	CTT/TAC	47.7	48.04	3.4411	3558	TCC/TAC	47.7	48.04	3.4412
3559	CAC/ACC	47.7	47.02	3.4216	3560	CCT/ACC	47.7	47.69	3.4344	3561	AAC/GCC	47.7	45.77	3.3977
3562	CAC/TCC	47.7	46.53	3.4122	3563	CAT/TCC	47.7	46.76	3.4166	3564	AAC/CGC	47.7	48.38	3.4476
3565	AAC/GGC	47.7	48.40	3.4480	3566	GCC/TGC	47.7	50.35	3.4853	3567	CAT/CTC	47.7	46.89	3.4192

(continued on next page)



(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$	<i>i</i>	centre	$T_i$	$T'_i$	$\tau$
3568	CTA/CTC	47.7	47.24	3.4258	3569	CCT/CCG	47.7	47.41	3.4291	3570	CTT/CAT	47.7	47.28	3.4265
3571	CAC/TAT	47.7	48.13	3.4428	3572	CTC/TAT	47.7	48.04	3.4411	3573	CCC/ACT	47.7	47.35	3.4280
3574	TCA/CTC	47.7	47.40	3.4290	3575	TAT/TGG	47.7	48.67	3.4531	3576	TCC/GCC	47.7	47.46	3.4300
3577	TTT/TCC	47.7	47.58	3.4324	3578	TTT/CTT	47.7	47.69	3.4344	3579	TAT/CAG	47.6	49.78	3.4745
3580	TAC/CGT	47.6	48.70	3.4537	3581	AGC/CAA	47.6	49.52	3.4694	3582	CCG/CAA	47.6	47.17	3.4245
3583	ACG/GAA	47.6	48.70	3.4537	3584	AGC/GAA	47.6	49.86	3.4759	3585	CCA/TAA	47.6	48.04	3.4412
3586	ATC/ACA	47.6	45.48	3.3922	3587	CAG/CCA	47.6	47.87	3.4379	3588	GAG/TGA	47.6	48.93	3.4582
3589	CCA/TTA	47.6	47.87	3.4379	3590	ATA/CAC	47.6	48.13	3.4428	3591	CAT/CAC	47.6	47.23	3.4256
3592	ATA/ACC	47.6	46.91	3.4195	3593	ATA/TGC	47.6	52.09	3.5187	3594	GAC/TGC	47.6	47.58	3.4324
3595	AGC/CTC	47.6	47.85	3.4374	3596	ATA/CTC	47.6	47.66	3.4338	3597	CCA/CTC	47.6	47.08	3.4229
3598	ACG/GAT	47.6	48.46	3.4492	3599	GCC/TAT	47.6	49.10	3.4614	3600	TCC/TAT	47.6	48.53	3.4505
3601	ATC/GCT	47.6	46.11	3.4043	3602	TCC/GCT	47.6	47.44	3.4296	3603	CCG/CTT	47.6	47.88	3.4380
3604	CCT/TTT	47.6	47.16	3.4243	3605	GAT/TGT	47.6	49.25	3.4643	3606	TAC/CCA	47.5	46.81	3.4176
3607	TAA/CGA	47.5	47.81	3.4367	3608	TAA/CGC	47.5	47.18	3.4248	3609	CTG/CCG	47.5	47.81	3.4367
3610	AGC/TTT	47.5	50.48	3.4878	3611	CGT/TTT	47.5	46.33	3.4085	3612	CAC/TAA	47.5	47.99	3.4402
3613	ATA/CCA	47.5	46.03	3.4028	3614	ATG/CCA	47.5	48.07	3.4417	3615	CCA/TCA	47.5	47.16	3.4243
3616	CGC/CTA	47.5	47.12	3.4236	3617	TCA/CTA	47.5	48.03	3.4409	3618	TTC/CTA	47.5	46.97	3.4207
3619	CCA/CAC	47.5	46.67	3.4150	3620	TCT/CCC	47.5	46.14	3.4049	3621	TTC/CCC	47.5	46.28	3.4075
3622	CCT/TCC	47.5	46.25	3.4069	3623	ACA/GTC	47.5	47.57	3.4321	3624	CAC/TTC	47.5	46.27	3.4074
3625	AAG/CAG	47.5	48.64	3.4527	3626	CAA/CAG	47.5	49.46	3.4683	3627	ATT/CCG	47.5	46.43	3.4104
3628	ACT/ATG	47.5	46.76	3.4167	3629	ATT/CCT	47.5	45.92	3.4006	3630	GCC/GCT	47.5	48.01	3.4405
3631	ATC/ATT	47.5	47.90	3.4385	3632	ATC/GTC	47.5	47.93	3.4390	3633	ACT/GAG	47.5	48.52	3.4504
3634	CCT/TCCT	47.5	46.10	3.4041	3635	CTC/CGT	47.5	46.98	3.4208	3636	CTC/ATT	47.5	47.53	3.4315
3637	ACT/TTT	47.4	51.44	3.5061	3638	ACA/AAA	47.4	47.43	3.4294	3639	CCT/CCA	47.4	47.23	3.4256
3640	ACA/TCA	47.4	50.41	3.4866	3641	CAA/TCA	47.4	47.86	3.4377	3642	TCC/TCA	47.4	46.59	3.4135
3643	ATA/CGA	47.4	47.78	3.4361	3644	ATG/CGA	47.4	48.51	3.4501	3645	TTC/CGA	47.4	47.48	3.4305
3646	TTG/CGA	47.4	47.93	3.4390	3647	ATC/CTA	47.4	47.44	3.4297	3648	CAC/TTA	47.4	47.81	3.4367
3649	ACA/TAC	47.4	50.93	3.4964	3650	CCC/ACC	47.4	46.99	3.4210	3651	CTC/ACC	47.4	47.02	3.4216
3652	TTC/TCC	47.4	47.15	3.4242	3653	ATT/AGC	47.4	48.70	3.4538	3654	AAT/CGC	47.4	49.07	3.4608
3655	AAT/GGC	47.4	49.00	3.4595	3656	GCC/GTC	47.4	48.62	3.4523	3657	CGC/TTC	47.4	47.31	3.4272
3658	GCT/TTC	47.4	48.30	3.4462	3659	TCG/CAG	47.4	47.96	3.4396	3660	CTG/TGG	47.4	47.46	3.4300
3661	CTT/CCT	47.4	47.11	3.4233	3662	GCC/GTT	47.4	48.67	3.4533	3663	TAC/CCC	47.4	46.68	3.4151
3664	TCC/TCC	47.4	46.38	3.4094	3665	TAT/CGT	47.4	48.80	3.4556	3666	CCA/CAA	47.3	46.92	3.4197
3667	CTC/CAA	47.3	46.43	3.4104	3668	AGC/CCA	47.3	49.63	3.4716	3669	CAA/CCA	47.3	47.25	3.4261
3670	TCA/CCA	47.3	47.15	3.4242	3671	TTC/CCA	47.3	46.34	3.4087	3672	ATA/GCA	47.3	47.41	3.4291
3673	CTA/TCA	47.3	47.60	3.4326	3674	CCC/CGA	47.3	47.88	3.4380	3675	TTA/CGA	47.3	47.17	3.4245
3676	CTT/TGA	47.3	48.31	3.4463	3677	GCC/TTA	47.3	48.80	3.4557	3678	CCC/AAC	47.3	47.20	3.4251
3679	CCT/AAC	47.3	47.78	3.4361	3680	CAA/CAC	47.3	46.99	3.4210	3681	AGC/GAC	47.3	47.84	3.4373
3682	AGC/ACC	47.3	49.04	3.4604	3683	ATT/GCC	47.3	46.08	3.4037	3684	GCC/TCC	47.3	48.03	3.4409
3685	AGC/AGC	47.3	48.50	3.4499	3686	ATT/TGC	47.3	52.34	3.5234	3687	CCC/ATC	47.3	47.40	3.4290
3688	ACA/TTC	47.3	51.54	3.5080	3689	CCT/TTC	47.3	46.47	3.4112	3690	CAC/CTT	47.3	46.87	3.4188
3691	TCC/CGC	47.3	47.96	3.4396	3692	ATC/ATC	47.3	48.10	3.4422	3693	AGG/CAG	47.3	49.67	3.4723
3694	TTT/GCG	47.3	49.11	3.4615	3695	CGG/TGT	47.3	47.21	3.4252	3696	TCT/CTT	47.3	47.28	3.4267
3697	TGG/CAG	47.2	49.72	3.4732	3698	TCC/TTC	47.2	47.35	3.4280	3699	TTG/CGG	47.2	47.92	3.4389
3700	CGC/AAT	47.2	48.23	3.4449	3701	ACC/AGT	47.2	48.44	3.4488	3702	AGC/GGT	47.2	48.21	3.4444
3703	CCT/CTT	47.2	47.07	3.4226	3704	CAC/TCA	47.2	46.73	3.4160	3705	CTA/TGA	47.2	46.57	3.4131
3706	CCC/ATA	47.2	47.95	3.4395	3707	CAA/CTA	47.2	47.88	3.4380	3708	CCG/CTA	47.2	47.54	3.4316
3709	ATT/CAC	47.2	47.60	3.4326	3710	CTC/TAC	47.2	47.34	3.4278	3711	AAA/CCC	47.2	46.49	3.4115
3712	AAT/CCC	47.2	47.40	3.4289	3713	TAT/CCC	47.2	46.97	3.4207	3714	CTT/TCC	47.2	46.30	3.4078
3715	CCC/CGC	47.2	46.87	3.4188	3716	CTT/CGC	47.2	47.39	3.4287	3717	ATC/TGC	47.2	52.11	3.5190
3718	AAC/CTC	47.2	46.80	3.4175	3719	TGT/TGG	47.2	47.32	3.4274	3720	CCC/AAT	47.2	47.66	3.4340
3721	CAC/CAT	47.2	47.21	3.4252	3722	TCC/TCT	47.2	46.59	3.4135	3723	GGT/TGT	47.2	46.76	3.4166

(continued on next page)

(S1 continued) Colours: Single mismatches , double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
3724	TGC/CTT	47.2	46.42	3.4101	3725	TAC/CCT	47.2	46.51	3.4119	3726	TAC/CTC	47.2	46.18	3.4056
3727	TCA/TGC	47.2	48.38	3.4476	3728	TTG/TGT	47.2	47.66	3.4338	3729	TTT/CGG	47.2	48.39	3.4478
3730	AAC/CCT	47.2	46.76	3.4166	3731	GTT/TGT	47.2	47.76	3.4357	3732	TAT/TGT	47.2	48.07	3.4418
3733	CCC/ATT	47.2	47.51	3.4310	3734	CAC/CAA	47.1	46.76	3.4167	3735	CCC/ACA	47.1	47.37	3.4283
3736	CCA/CCA	47.1	46.76	3.4166	3737	CAT/TGA	47.1	48.29	3.4460	3738	CCA/CTA	47.1	47.76	3.4358
3739	CGC/TTA	47.1	45.68	3.3960	3740	AAC/AAC	47.1	47.82	3.4370	3741	AAC/ACC	47.1	45.41	3.3909
3742	CTA/CCC	47.1	47.12	3.4236	3743	ACA/TCC	47.1	50.60	3.4901	3744	ATT/CTC	47.1	47.35	3.4280
3745	ACG/GCG	47.1	48.58	3.4514	3746	CAC/CCT	47.1	46.07	3.4034	3747	CTT/CTT	47.1	47.28	3.4265
3748	TCC/TTT	47.1	47.55	3.4318	3749	TCT/CTC	47.1	46.65	3.4145	3750	TTT/CAG	47.1	50.45	3.4873
3751	CCT/CAT	47.1	46.18	3.4056	3752	CTC/TCT	47.1	46.43	3.4103	3753	TCC/CAA	47.0	46.64	3.4144
3754	CTA/CCA	47.0	47.13	3.4237	3755	TCC/GCA	47.0	47.55	3.4318	3756	CTC/TCA	47.0	46.22	3.4063
3757	AGC/AGA	47.0	48.86	3.4569	3758	AAA/TGA	47.0	51.50	3.5073	3759	CTA/CTA	47.0	47.73	3.4353
3760	ATC/AAC	47.0	48.41	3.4482	3761	TCC/CAC	47.0	46.69	3.4154	3762	CTA/CGC	47.0	47.97	3.4398
3763	AGC/GGC	47.0	48.98	3.4592	3764	ATT/GGC	47.0	48.30	3.4462	3765	TTC/CTC	47.0	46.13	3.4046
3766	CTT/TTC	47.0	47.21	3.4252	3767	TCG/TCG	47.0	48.83	3.4563	3768	CGG/TGG	47.0	47.18	3.4246
3769	TTT/CCT	47.0	47.29	3.4268	3770	TCT/CAG	47.0	47.79	3.4364	3771	TCT/TCG	47.0	48.08	3.4420
3772	AAC/CCA	46.9	45.42	3.3910	3773	CAC/TGA	46.9	46.72	3.4159	3774	ACG/GTA	46.9	47.85	3.4374
3775	CAC/TAC	46.9	47.71	3.4348	3776	ATA/CCC	46.9	46.01	3.4024	3777	CAT/CCC	46.9	46.76	3.4167
3778	GCC/GCC	46.9	47.83	3.4372	3779	ATA/CGC	46.9	47.27	3.4264	3780	CTT/CCG	46.9	47.20	3.4251
3781	ATT/GCG	46.9	47.29	3.4268	3782	CTA/TCG	46.9	49.49	3.4689	3783	TAG/TGG	46.9	48.59	3.4517
3784	ACA/CTT	46.9	45.36	3.3898	3785	CCC/TCT	46.9	46.06	3.4032	3786	ATC/CGT	46.9	47.86	3.4377
3787	TCC/TGT	46.9	47.87	3.4379	3788	ATC/CTT	46.9	47.00	3.4213	3789	TAC/CGC	46.9	47.74	3.4354
3790	CGC/CAT	46.9	48.48	3.4496	3791	ACC/CGT	46.9	48.03	3.4409	3792	ACG/AAA	46.8	47.47	3.4303
3793	ACT/AAA	46.8	48.64	3.4527	3794	ACA/GAA	46.8	48.11	3.4425	3795	CGC/TGA	46.8	49.20	3.4634
3796	ACT/ATA	46.8	47.57	3.4322	3797	AAT/CAC	46.8	47.29	3.4268	3798	CCT/TAC	46.8	47.14	3.4239
3799	CCT/CCC	46.8	45.87	3.3996	3800	CTT/CCC	46.8	45.91	3.4004	3801	TTT/CCC	46.8	46.32	3.4082
3802	ATC/GCC	46.8	45.83	3.3990	3803	CCC/TCC	46.8	45.79	3.3981	3804	CAC/CTC	46.8	45.06	3.3841
3805	TGG/TGG	46.8	46.84	3.4182	3806	ACG/GTT	46.8	48.20	3.4443	3807	CAC/CCA	46.7	45.96	3.4013
3808	AAC/GCA	46.7	46.30	3.4078	3809	AGC/GTA	46.7	48.62	3.4523	3810	CTC/TTA	46.7	47.22	3.4255
3811	AGC/AAC	46.7	47.57	3.4322	3812	AGC/CAC	46.7	47.20	3.4251	3813	CTT/CAC	46.7	45.89	3.4000
3814	ATT/ACC	46.7	45.80	3.3982	3815	TTA/CGC	46.7	46.63	3.4141	3816	GGA/TGC	46.7	47.78	3.4361
3817	GGT/TGC	46.7	47.00	3.4213	3818	CCC/TTC	46.7	46.00	3.4022	3819	CAT/TCG	46.7	47.97	3.4398
3820	CCC/TAT	46.7	47.21	3.4254	3821	TCT/CCT	46.7	46.27	3.4074	3822	ACT/AGC	46.7	48.35	3.4470
3823	ACT/CGC	46.7	47.94	3.4392	3824	TTT/CCG	46.7	47.79	3.4364	3825	ACC/TTT	46.7	50.70	3.4920
3826	GGA/TGA	46.6	46.99	3.4211	3827	TAC/TGC	46.6	48.01	3.4405	3828	ATC/CCA	46.6	44.79	3.3789
3829	CTC/CCA	46.6	45.83	3.3988	3830	GCC/GCA	46.6	48.12	3.4427	3831	AGC/CTA	46.6	47.86	3.4377
3832	CAC/CTA	46.6	46.59	3.4135	3833	ATC/CAC	46.6	46.90	3.4194	3834	ATC/ACC	46.6	45.46	3.3918
3835	TCC/CCC	46.6	45.56	3.3937	3836	CTC/CGC	46.6	47.47	3.4303	3837	TAT/CGC	46.6	47.15	3.4242
3838	CCT/CTC	46.6	46.15	3.4050	3839	CTT/CTC	46.6	46.63	3.4142	3840	ACA/GCG	46.6	47.98	3.4401
3841	CTG/TCG	46.6	48.41	3.4482	3842	CGT/TGG	46.6	47.72	3.4350	3843	ATC/CCT	46.6	45.08	3.3845
3844	CTG/TGT	46.6	48.10	3.4422	3845	CCC/TTT	46.6	46.33	3.4084	3846	CTC/TTT	46.6	46.63	3.4141
3847	GCC/TTT	46.6	48.33	3.4466	3848	ATC/CTC	46.5	46.37	3.4093	3849	ACT/TTT	46.5	50.65	3.4910
3850	GGC/TGT	46.5	46.36	3.4090	3851	CTG/TGA	46.5	47.21	3.4252	3852	AAC/CAC	46.5	46.46	3.4110
3853	ACA/GAC	46.5	47.87	3.4379	3854	CCC/TAC	46.5	47.32	3.4274	3855	CTC/CCC	46.5	45.84	3.3991
3856	GCC/TTC	46.5	48.04	3.4412	3857	TTG/CAG	46.5	49.18	3.4630	3858	ACG/AAT	46.5	47.96	3.4396
3859	TTC/CCT	46.5	46.44	3.4106	3860	TTC/CGT	46.5	45.93	3.4009	3861	TTT/CTC	46.5	46.91	3.4195
3862	CTC/TTC	46.5	46.48	3.4113	3863	CTC/CTT	46.5	46.27	3.4074	3864	AGC/GGA	46.4	48.70	3.4538
3865	CTC/CTA	46.4	46.72	3.4159	3866	TCC/CTA	46.4	46.87	3.4188	3867	CCT/CAC	46.4	46.37	3.4093
3868	CTC/TCC	46.4	46.24	3.4068	3869	TGT/TGC	46.4	45.98	3.4018	3870	CTA/CAG	46.4	48.59	3.4517
3871	ACG/TCG	46.4	50.14	3.4812	3872	ACT/CTG	46.4	45.80	3.3984	3873	CTC/CAT	46.4	45.89	3.4000
3874	TCC/CAT	46.4	46.67	3.4150	3875	ACT/GAT	46.4	47.15	3.4240	3876	TTT/CGT	46.4	47.28	3.4267
3877	GTA/TGA	46.4	48.01	3.4406	3878	CGC/TAT	46.4	46.30	3.4078	3879	AGC/CCT	46.4	48.65	3.4528

(continued on next page)

(S1 continued) Colours: Single mismatches, double mismatches and triple mismatches

$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$	$i$	centre	$T_i$	$T'_i$	$\tau$
3880	CCT/CCT	46.4	45.82	3.3987	3881	TCC/CCA	46.3	45.88	3.3999	3882	ATC/GCA	46.3	46.09	3.4038
3883	TTT/TGA	46.3	47.95	3.4395	3884	AGC/ATA	46.3	48.05	3.4414	3885	CTA/CAC	46.3	46.43	3.4104
3886	AAC/CCC	46.3	44.77	3.3786	3887	AGC/CCC	46.3	48.29	3.4460	3888	CAC/CCC	46.3	45.43	3.3912
3889	ATC/CGC	46.3	46.82	3.4179	3890	CAC/TGC	46.3	46.95	3.4202	3891	TGA/TGC	46.3	46.23	3.4065
3892	CTC/CCT	46.3	45.94	3.4010	3893	GTC/TGT	46.3	46.52	3.4120	3894	CGG/CAG	46.3	49.17	3.4627
3895	TTC/CTT	46.3	46.33	3.4084	3896	ACT/CAA	46.2	47.15	3.4240	3897	CCA/TGA	46.2	47.80	3.4366
3898	CGG/TGA	46.2	46.50	3.4116	3899	ACA/AAC	46.2	47.02	3.4217	3900	CAC/CAC	46.2	43.42	3.3528
3901	ACT/TAC	46.2	50.20	3.4825	3902	CCC/CCC	46.2	45.46	3.3918	3903	TTC/CGC	46.2	46.07	3.4034
3904	CCC/CTC	46.2	45.98	3.4018	3905	ACG/AAG	46.2	47.73	3.4353	3906	ATG/CAG	46.2	48.95	3.4586
3907	CCG/TCG	46.2	48.42	3.4483	3908	TTT/TCG	46.2	48.50	3.4499	3909	ACT/TAT	46.2	50.69	3.4919
3910	CGC/ATT	46.2	46.66	3.4148	3911	CGC/TTT	46.2	45.67	3.3959	3912	TCC/CTC	46.2	46.15	3.4050
3913	CGC/CTT	46.2	45.92	3.4006	3914	ACC/CGA	46.1	47.86	3.4377	3915	TAG/TGA	46.1	47.79	3.4363
3916	TCC/TGA	46.1	47.71	3.4348	3917	CCC/TTA	46.1	46.74	3.4163	3918	CTC/CAC	46.1	45.19	3.3866
3919	ATC/CCC	46.1	44.74	3.3780	3920	ATT/CCC	46.1	45.03	3.3835	3921	ACA/GCC	46.1	45.85	3.3993
3922	AAA/TGC	46.1	51.45	3.5063	3923	ACT/GCA	46.0	46.80	3.4175	3924	GAA/TGA	46.0	48.39	3.4479
3925	GTG/TGA	46.0	48.35	3.4470	3926	CTT/TGG	46.0	47.81	3.4367	3927	ACG/CAT	46.0	46.99	3.4211
3928	CCC/CCT	46.0	45.59	3.3943	3929	CCC/CTT	46.0	46.06	3.4032	3930	CCC/TCA	45.9	46.04	3.4029
3931	ACC/AGA	45.9	48.27	3.4456	3932	CGA/TGA	45.9	46.08	3.4037	3933	CTC/TGA	45.9	46.79	3.4172
3934	ACC/TTA	45.9	51.06	3.4989	3935	AAT/TGC	45.9	51.02	3.4981	3936	ACA/ATC	45.9	46.22	3.4063
3937	CTC/CTC	45.9	45.83	3.3990	3938	ACT/AAG	45.9	47.76	3.4357	3939	ACG/ACG	45.9	46.34	3.4087
3940	AGC/AGT	45.9	48.23	3.4449	3941	GGC/TGA	45.9	47.53	3.4313	3942	GTC/TGA	45.9	47.97	3.4398
3943	ACC/TAA	45.8	50.31	3.4845	3944	CCC/TAA	45.8	47.25	3.4261	3945	CCC/CCA	45.8	45.61	3.3947
3946	ACT/CTA	45.8	47.00	3.4213	3947	ATT/CGC	45.8	46.82	3.4178	3948	CCA/TGC	45.8	47.18	3.4246
3949	TGT/TGT	45.8	45.58	3.3941	3950	CCC/CAA	45.7	45.71	3.3966	3951	CCC/CAC	45.7	45.46	3.3918
3952	ACA/ACC	45.7	45.37	3.3901	3953	ACC/AGC	45.7	47.27	3.4264	3954	ACC/TTC	45.7	50.32	3.4847
3955	CCA/CAG	45.7	48.33	3.4466	3956	CTT/TGT	45.7	46.40	3.4098	3957	TCC/CTT	45.7	46.50	3.4116
3958	TTT/CGC	45.7	46.33	3.4085	3959	CGC/TGT	45.7	48.46	3.4492	3960	CAG/TGA	45.6	47.37	3.4283
3961	ACA/ATA	45.6	46.73	3.4161	3962	ACG/ATA	45.6	46.78	3.4170	3963	ACC/TAC	45.6	49.77	3.4742
3964	GGC/TGC	45.6	47.24	3.4259	3965	TCC/CCT	45.6	45.95	3.4012	3966	TTT/TGG	45.6	47.41	3.4291
3967	ACC/TAT	45.6	50.19	3.4822	3968	CGT/TGT	45.5	45.73	3.3969	3969	CCC/CTA	45.5	46.41	3.4100
3970	TGC/TGC	45.5	45.92	3.4006	3971	CAT/CAG	45.5	47.91	3.4386	3972	ACG/ACT	45.5	46.59	3.4134
3973	ACT/TCT	45.5	49.58	3.4706	3974	TGC/TGT	45.5	45.16	3.3862	3975	ACT/TCG	45.5	51.07	3.4991
3976	CCC/TGT	45.5	46.65	3.4145	3977	ACA/ACA	45.4	45.04	3.3838	3978	ACT/ACA	45.4	45.55	3.3935
3979	ACC/CGC	45.4	46.85	3.4183	3980	CTT/CAG	45.4	48.61	3.4520	3981	CCT/TCG	45.4	47.66	3.4338
3982	TTG/TGG	45.4	47.18	3.4246	3983	AGC/GTT	45.4	47.32	3.4274	3984	ACA/CAA	45.3	46.29	3.4076
3985	ACG/CAA	45.3	46.56	3.4128	3986	TGA/TGA	45.3	45.78	3.3979	3987	ACA/CAC	45.3	46.03	3.4028
3988	ACT/GAC	45.3	46.78	3.4170	3989	ACT/GTT	45.3	47.07	3.4226	3990	ACT/ACG	45.3	45.54	3.3934
3991	ACG/ACA	45.2	45.64	3.3953	3992	TCT/TGC	45.2	47.79	3.4363	3993	TAA/TGA	45.2	47.02	3.4216
3994	CTC/TGT	45.2	45.40	3.3906	3995	ACA/CTC	45.1	45.53	3.3931	3996	CTT/TCG	45.1	47.71	3.4348
3997	ACG/ATT	45.1	47.12	3.4235	3998	TTT/TGT	45.1	46.07	3.4034	3999	AGC/CAT	45.1	47.65	3.4337
4000	AGC/GAT	45.1	47.82	3.4369	4001	ACC/AAA	45.0	46.21	3.4062	4002	TGG/TGA	45.0	46.66	3.4148
4003	CAG/CAG	45.0	46.74	3.4163	4004	ACC/TCA	44.9	49.35	3.4663	4005	ACT/TCC	44.9	49.66	3.4720
4006	ACC/TCT	44.9	49.51	3.4693	4007	AGC/TGT	44.8	51.39	3.5051	4008	ACA/GCA	44.7	45.62	3.3949
4009	CAA/TGA	44.7	47.14	3.4239	4010	ACC/TCC	44.7	49.31	3.4654	4011	GAA/TGC	44.7	47.82	3.4370
4012	ACG/CAG	44.7	46.73	3.4160	4013	TAA/TGC	44.7	47.47	3.4303	4014	TCC/TGC	44.7	46.76	3.4167
4015	AGC/AAT	44.7	47.87	3.4379	4016	ACA/CCA	44.6	44.76	3.3785	4017	ACA/CTA	44.6	46.16	3.4051
4018	ACG/CTT	44.6	46.34	3.4087	4019	ACT/CAG	44.6	46.69	3.4154	4020	ACC/GTT	44.6	46.60	3.4137
4021	ACC/GTA	44.5	47.05	3.4223	4022	ACG/CCT	44.5	45.14	3.3857	4023	CTG/CAG	44.5	47.29	3.4268
4024	AGC/CTT	44.5	46.48	3.4113	4025	AGC/TGA	44.4	51.47	3.5067	4026	TTC/TGA	44.4	46.56	3.4129
4027	TAT/TGC	44.4	46.95	3.4204	4028	ACG/CCG	44.4	44.39	3.3714	4029	TTC/TGT	44.4	45.20	3.3869
4030	TTG/TGA	44.3	47.05	3.4221	4031	GAT/TGC	44.3	47.89	3.4383	4032	GTA/TGC	44.3	47.37	3.4284
4033	CCG/CAG	44.3	47.23	3.4256	4034	ACT/AAT	44.3	46.54	3.4125	4035	ACG/CTA	44.2	45.95	3.4012

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Table S2. Base pair context dependence groups. Shown are the base pair in form BP<sup>α</sup> where α is the context label, the transversion/transition (VT) classification, and the context trimers where lowercase letters refer to mismatches base pairs.

group	VT	complete context set	group	VT	complete context set
AA <sup>a</sup>	vvv	aaa/aaa	AA <sup>b</sup>	vvv	cat/tat, tac/tat
AA <sup>c</sup>	vvv	aaa/gag, aag/gaa, gaa/aag	AA <sup>d</sup>	vvv	gag/gag
AA <sup>e</sup>	tvv	gag/gat, gag/tag	AA <sup>f</sup>	Tvv	Aaa/Tag, Aag/Taa, aaA/gaT, gaA/aaT
AA <sup>g</sup>	tvv	gag/tat, gat/tag, tag/gat	AA <sup>h</sup>	vvv	gat/gat
AA <sup>i</sup>	tvv	gat/tat, tag/tat	AA <sup>j</sup>	vvv	tat/tat
AA <sup>k</sup>	TvT	AaA/TaT, AaT/TaA, TaA/AaT	AA <sup>l</sup>	vvv	aac/aac
AA <sup>m</sup>	Tvv	aaC/aaG, aaG/aaC	AA <sup>n</sup>	vvv	aac/aat, aat/aac
AA <sup>o</sup>	tvv	aaa/aac, aaa/caa	AA <sup>p</sup>	tvv	aac/cac, caa/cac
AA <sup>q</sup>	Tvt	Caa/Gac, aaC/caG, aaG/caC, caC/aaG	AA <sup>r</sup>	tvv	aac/cat, aat/cac, caa/tac, cac/aat
AA <sup>s</sup>	vvv	aac/gac, caa/cag	AA <sup>t</sup>	Tvv	Caa/Gag, Gaa/Cag, aaC/gaG, aaG/gaC
AA <sup>u</sup>	vvv	aac/gat, aat/gac, caa/tag, gac/aat	AA <sup>v</sup>	Tvv	Aac/Tac, caA/caT
AA <sup>w</sup>	vvv	aaa/aag, aaa/gaa	AA <sup>x</sup>	TvT	AaC/TaG, AaG/TaC, CaA/GaT, GaA/CaT
AA <sup>y</sup>	Tvv	Aac/Tat, Aat/Tac, caA/taT, taA/caT	AA <sup>z</sup>	vvv	aag/aag
AA <sup>aa</sup>	tvv	aag/aat, aat/aag	AA <sup>ab</sup>	tvv	aag/cag, cag/aag
AA <sup>ac</sup>	tvv	aag/cat, aat/cag, cag/aat, cat/aag	AA <sup>ad</sup>	Tvv	Aaa/Taa, aaA/aaT
AA <sup>ae</sup>	vvv	aag/gag, gaa/gag	AA <sup>af</sup>	tvv	aag/gat, aat/gag, gaa/tag, gag/aat
AA <sup>ag</sup>	Tvv	Aag/Tag, gaA/gaT	AA <sup>ah</sup>	Tvt	Aag/Tat, Aat/Tag, gaA/taT, taA/gaT
AA <sup>ai</sup>	vvv	aat/aat	AA <sup>aj</sup>	tvv	aat/cat, cat/aat
AA <sup>ak</sup>	vvv	aat/gat, gat/aat	AA <sup>al</sup>	Tvv	Aat/Tat, taA/taT
AA <sup>am</sup>	tvv	aaa/cac, aac/caa, caa/aac	AA <sup>an</sup>	tvv	aaa/cag, aaa/gac, aac/gaa, caa/aag
AA <sup>ao</sup>	vvv	cac/cac	AA <sup>ap</sup>	Tvv	Cac/Gac, caC/caG
AA <sup>aq</sup>	vvv	cac/cat, cac/tac	AA <sup>ar</sup>	TvT	CaC/GaG, CaG/GaC, GaC/CaG
AA <sup>as</sup>	Tvv	Cac/Gat, Gac/Cat, caC/taG, caG/taC	AA <sup>at</sup>	Tvt	Aaa/Tac, Aac/Taa, aaA/caT, caA/aaT
AA <sup>au</sup>	vvv	cac/tat, cat/tac, tac/cat	AA <sup>av</sup>	vvv	cag/cag
AA <sup>aw</sup>	tvv	cag/cat, cat/cag	AA <sup>ax</sup>	Tvv	Cag/Gag, gaC/gaG
AA <sup>ay</sup>	Tvt	Cag/Gat, Cat/Gag, Gag/Cat, gaC/taG	AA <sup>az</sup>	vvv	cag/tag, gac/gat
AA <sup>ba</sup>	tvv	cag/tat, cat/tag, gac/tat, tac/gat	AA <sup>bb</sup>	vvv	cat/cat
AA <sup>bc</sup>	Tvv	Cat/Gat, Gat/Cat	AC <sup>a</sup>	vtv	aaa/aca
AC <sup>b</sup>	vtv	aaa/gcg, aag/gca, aca/gag, gaa/acg	AC <sup>c</sup>	Ttv	Aaa/Tcg, Aag/Tca, Aca/Tag, aaA/gcT, aaT/gcA, acA/gaT, gaA/acT, gcA/aaT
AC <sup>d</sup>	vtv	cac/ccc	AC <sup>e</sup>	Ttv	Cac/Gcc, caC/ccG, caG/ccC, ccC/caG
AC <sup>f</sup>	vtv	cac/cct, cac/tcc, cat/ccc, ccc/cat	AC <sup>g</sup>	TtT	CaC/GcG, CaG/GcC, CcC/GaG, GaC/CcG
AC <sup>h</sup>	Ttv	Cac/Gct, Cat/Gcc, Ccc/Gat, Gac/Cct, Gcc/Cat, caC/tcG, caG/tcC, ccC/taG	AC <sup>i</sup>	vtv	cac/tct, cat/tcc, ccc/tat, tac/cct
AC <sup>j</sup>	vtv	cag/ccg, ccg/cag	AC <sup>k</sup>	ttv	cag/cct, cat/ccg, ccg/cat, cct/cag
AC <sup>l</sup>	Ttv	Cag/Gcg, Ccg/Gag, Gag/Ccg, gaC/gcG	AC <sup>m</sup>	Ttt	Cag/Gct, Cat/Gcg, Ccg/Gat, Cct/Gag, Gag/Cct, Gat/Ccg, Gcg/Cat, gaC/tcG
AC <sup>n</sup>	vtv	cag/tcg, ccg/tag, gac/gct, gcc/gat	AC <sup>o</sup>	ttv	cag/tct, cat/tcg, ccg/tat, cct/tag, gac/tct, gcc/tat, tac/gct, tag/cct
AC <sup>p</sup>	vtv	cat/cct, cct/cat	AC <sup>q</sup>	Ttv	Cat/Gct, Cct/Gat, Gat/Cct, Gct/Cat
AC <sup>r</sup>	TtT	AaA/TcT, AaT/TcA, AcA/TaT, TaA/AcT	AC <sup>s</sup>	vtv	cat/tct, cct/tat, tac/tct, tat/cct
AC <sup>t</sup>	vtv	aac/acc, acc/aac	AC <sup>u</sup>	Ttv	aaC/acG, aaG/acC, acC/aaG, acG/aaC
AC <sup>v</sup>	ttv	aaa/acc, aaa/cca, aac/aca, aca/aac	AC <sup>w</sup>	vtv	aac/act, aat/acc, acc/aat, act/aac
AC <sup>x</sup>	vtv	gag/gcg	AC <sup>y</sup>	ttv	gag/gct, gag/tcg, gat/gcg, gcg/gat
AC <sup>z</sup>	ttt	gag/tct, gat/tcg, gcg/tat, tag/gct	AC <sup>aa</sup>	ttv	aac/ccc, acc/cac, caa/ccc, cac/acc
AC <sup>ab</sup>	vtv	gat/gct, gct/gat	AC <sup>ac</sup>	ttv	gat/tct, gct/tat, tag/tct, tat/gct
AC <sup>ad</sup>	Ttt	Caa/Gcc, aaC/ccG, aaG/ccC, acC/caG, acG/caC, caC/acG, caG/acC, ccC/aaG	AC <sup>ae</sup>	ttv	aac/cct, aat/ccc, acc/cat, act/cac, caa/tcc, cac/act, cat/acc, ccc/aat
AC <sup>af</sup>	vtv	tat/tct	AC <sup>ag</sup>	vtv	aac/gcc, acc/gac, caa/ccg, cca/cag

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(S2 continued)

group	VT	complete context set	group	VT	complete context set
AC <sup>ah</sup>	Ttv	Caa/Gcg, Cca/Gag, Gaa/Ccg, aaC/gcG, aaG/gcC, acC/gaG, acG/gaC, gaC/acG	AC <sup>ai</sup>	vtv	aac/gct, aat/gcc, acc/gat, act/gac, caa/tcg, cca/tag, gac/act, gcc/aat
AC <sup>aj</sup>	vtv	aaa/acg, aaa/gca, aag/aca, aca/aag	AC <sup>ak</sup>	Ttv	Aac/Tcc, Acc/Tac, caA/ccT, ccA/caT
AC <sup>al</sup>	TtT	AaC/TcG, AaG/TcC, AcC/TaG, AcG/TaC, CaA/GcT, CcA/GaT, GaA/CcT, GcA/CaT	AC <sup>am</sup>	Ttv	Aac/Tct, Aat/Tcc, Acc/Tat, Act/Tac, Tac/Act, caA/tcT, ccA/taT, taA/ccT
AC <sup>an</sup>	vtv	aag/acg, acg/aag	AC <sup>ao</sup>	ttv	aag/act, aat/acg, acg/aat, act/aag
AC <sup>ap</sup>	ttv	aag/ccg, acg/cag, cag/acg, ccg/aag	AC <sup>aq</sup>	Ttv	Aaa/Tca, aaA/acT, aaT/acA, acA/aaT
AC <sup>ar</sup>	ttt	aag/cct, aat/ccg, acg/cat, act/cag, cag/act, cat/acg, ccg/aat, cct/aag	AC <sup>as</sup>	vtv	aag/gcg, acg/gag, gaa/gcg, gag/acg
AC <sup>at</sup>	ttv	aag/gct, aat/gcg, acg/gat, act/gag, gaa/tcg, gag/act, gat/acg, gcg/aat	AC <sup>au</sup>	Ttv	Aag/Tcg, Acg/Tag, gaA/gcT, gcA/gaT
AC <sup>av</sup>	Ttt	Aag/Tct, Aat/Tcg, Acg/Tat, Act/Tag, Tag/Act, gaA/tcT, gcA/taT, taA/gcT	AC <sup>aw</sup>	vtv	aat/act, act/aat
AC <sup>ax</sup>	ttv	aat/cct, act/cat, cat/act, cct/aat	AC <sup>ay</sup>	ttt	aaa/ccg, aac/cga, aca/cac, caa/acc
AC <sup>az</sup>	vtv	aat/gct, act/gat, gat/act, gct/aat	AC <sup>ba</sup>	Ttv	Aat/Tct, Act/Tat, Tat/Act, taA/tcT
AC <sup>bb</sup>	ttv	aaa/ccg, aaa/gcc, aac/gca, aag/cca, aca/cag, aca/gac, caa/acg, cca/aag	AC <sup>bc</sup>	Ttt	Aaa/Tcc, Aac/Tca, Aca/Tac, aaA/ccT, aaT/ccA, acA/caT, caA/acT, ccA/aaT
AG <sup>a</sup>	vvv	aaa/aga	AG <sup>b</sup>	vvv	aaa/ggg, aag/gga, aga/gag, gaa/agg
AG <sup>c</sup>	Tvv	Aaa/Tgg, Aag/Tga, Aga/Tag, aaA/ggT, aaT/ggA, agA/gaT, gaA/agT, ggA/aaT	AG <sup>d</sup>	vvv	cac/cgc
AG <sup>e</sup>	Tvv	Cac/Ggc, caC/cgG, caG/cgC, cgC/caG	AG <sup>f</sup>	vvv	cac/cgt, cac/tgc, cat/cgc, cgc/cat
AG <sup>g</sup>	TvT	CaC/GgG, CaG/GgC, CgC/GaG, GaC/CgG	AG <sup>h</sup>	Tvv	Cac/Ggt, Cat/Ggc, Cgc/Gat, Gac/Cgt, Ggc/Cat, caC/tgG, caG/tgC, cgC/taG
AG <sup>i</sup>	vvv	cac/tgt, cat/tgc, cgc/tat, tac/cgt	AG <sup>j</sup>	vvv	cag/cgg, cgg/cag
AG <sup>k</sup>	tvv	cag/cgt, cat/cgg, cgg/cat, cgt/cag	AG <sup>l</sup>	Tvv	Cag/Ggg, Cgg/Gag, Gag/Cgg, gaC/ggG
AG <sup>m</sup>	Tvt	Cag/Ggt, Cat/Ggg, Cgg/Gat, Cgt/Gag, Gag/Cgt, Gat/Cgg, Ggg/Cat, gaC/tgG	AG <sup>n</sup>	vvv	cag/tgg, cgg/tag, gac/ggt, ggc/gat
AG <sup>o</sup>	ttv	cag/tgt, cat/tgg, cgg/tat, cgt/tag, gac/tgt, ggc/tat, tac/ggt, tag/cgt	AG <sup>p</sup>	vvv	cat/cgt, cgt/cat
AG <sup>q</sup>	Tvv	Cat/Ggt, Cgt/Gat, Gat/Cgt, Ggt/Cat	AG <sup>r</sup>	TvT	AaA/TgT, AaT/TgA, AgA/TaT, TaA/AgT
AG <sup>s</sup>	vvv	cat/tgt, cgt/tat, tac/tgt, tat/cgt	AG <sup>t</sup>	vvv	aac/agc, agc/aac
AG <sup>u</sup>	Tvv	aaC/agG, aaG/agC, agC/aaG, agG/aaC	AG <sup>v</sup>	ttv	aaa/agc, aaa/cga, aac/aga, aga/aac
AG <sup>w</sup>	vvv	aac/agt, aat/agc, agc/aat, agt/aac	AG <sup>x</sup>	vvv	gag/ggg
AG <sup>y</sup>	ttv	gag/ggt, gag/tgg, gat/ggg, ggg/gat	AG <sup>z</sup>	ttv	gag/tgt, gat/tgg, ggg/tat, tag/ggt
AG <sup>aa</sup>	ttv	aac/cgc, agc/cac, caa/cgc, cac/agc	AG <sup>ab</sup>	vvv	gat/ggt, ggt/gat
AG <sup>ac</sup>	ttv	gat/tgt, ggt/tat, tag/tgt, tat/ggt	AG <sup>ad</sup>	Tvt	Caa/Ggc, aaC/cgG, aaG/cgC, agC/caG, agG/caC, caC/agG, caG/agC, cgC/aaG
AG <sup>ae</sup>	ttv	aac/cgt, aat/cgc, agc/cat, agt/cac, caa/tgc, cac/agt, cat/agc, cgc/aat	AG <sup>af</sup>	vvv	tat/tgt
AG <sup>ag</sup>	vvv	aac/ggc, agc/gac, caa/cgg, cga/cag	AG <sup>ah</sup>	Ttv	Caa/Ggg, Cga/Gag, Gaa/Cgg, aaC/ggG, aaG/ggC, agC/gaG, agG/gaC, gaC/agG
AG <sup>ai</sup>	vvv	aac/ggt, aat/ggc, agc/gat, agt/gac, caa/tgg, cga/tag, gac/agt, ggc/aat	AG <sup>aj</sup>	vvv	aaa/agg, aaa/gga, aag/aga, aga/aag
AG <sup>ak</sup>	Tvv	Aac/Tgc, Agc/Tac, caA/cgT, cgA/caT	AG <sup>al</sup>	TvT	AaC/TgG, AaG/TgC, AgC/TaG, AgG/TaC, CaA/GgT, CgA/GaT, GaA/CgT, GgA/CaT
AG <sup>am</sup>	Tvv	Aac/Tgt, Aat/Tgc, Agc/Tat, Agt/Tac, Tac/Agt, caA/tgT, cgA/taT, taA/cgT	AG <sup>an</sup>	vvv	aag/agg, agg/aag
AG <sup>ao</sup>	ttv	aag/agt, aat/agg, agg/aat, agt/aag	AG <sup>ap</sup>	ttv	aag/cgg, agg/cag, cag/agg, cgg/aag
AG <sup>aq</sup>	Tvv	Aaa/Tga, aaA/agT, aaT/agA, agA/aaT	AG <sup>ar</sup>	ttv	aag/cgt, aat/cgg, agg/cat, agt/cag, cag/agt, cat/agg, cgg/aat, cgt/aag
AG <sup>as</sup>	vvv	aag/ggg, agg/gag, gaa/ggg, gag/agg	AG <sup>at</sup>	ttv	aag/ggt, aat/ggg, agg/gat, agt/gag, gaa/tgg, gag/agt, gat/agg, ggg/aat
AG <sup>au</sup>	Tvv	Aag/Tgg, Agg/Tag, gaA/ggT, ggA/gaT	AG <sup>av</sup>	Tvt	Aag/Tgt, Aat/Tgg, Agg/Tat, Agt/Tag, Tag/Agt, gaA/tgT, ggA/taT, taA/ggT
AG <sup>aw</sup>	vvv	aat/agt, agt/aat	AG <sup>ax</sup>	ttv	aat/cgt, agt/cat, cat/agt, cgt/aat
AG <sup>ay</sup>	ttv	aaa/cgc, aac/cga, aga/cac, caa/agc	AG <sup>az</sup>	vvv	aat/ggt, agt/gat, gat/agt, ggt/aat
AG <sup>ba</sup>	Tvv	Aat/Tgt, Agt/Tat, Tat/Agt, taA/tgT	AG <sup>bb</sup>	ttv	aaa/cgg, aaa/ggc, aac/gga, aag/cga, aga/cag, aga/gac, caa/agg, cga/aag
AG <sup>bc</sup>	Tvt	Aaa/Tgc, Aac/Tga, Aga/Tac, aaA/cgT, aaT/cgA, agA/caT, caA/agT, cgA/aaT	CC <sup>a</sup>	vvv	aca/aca
CC <sup>b</sup>	vvv	cct/tct, tcc/tct	CC <sup>c</sup>	vvv	aca/gcg, acg/gca, gca/acg
CC <sup>d</sup>	vvv	gcg/gcg	CC <sup>e</sup>	ttv	gcg/gct, gcg/tcg
CC <sup>f</sup>	Tvv	Aca/Tcg, Acg/Tca, acA/gcT, gcA/acT	CC <sup>g</sup>	ttv	gcg/tct, gct/tcg, tcg/gct
CC <sup>h</sup>	vvv	gct/gct	CC <sup>i</sup>	ttv	gct/tct, tcg/tct
CC <sup>j</sup>	vvv	tct/tct	CC <sup>k</sup>	TvT	AcA/TcT, AcT/TcA, TcA/AcT
CC <sup>l</sup>	vvv	acc/acc	CC <sup>m</sup>	Tvv	acC/acG, acG/acC
CC <sup>n</sup>	vvv	acc/act, act/acc	CC <sup>o</sup>	ttv	aca/acc, aca/cga
CC <sup>p</sup>	ttv	acc/ccg, cca/ccg	CC <sup>q</sup>	Tvt	Cca/Gcc, acC/ccG, acG/ccC, ccC/acG
CC <sup>r</sup>	ttv	acc/cct, act/ccg, cca/tcc, ccc/act	CC <sup>s</sup>	vvv	acc/gcc, cca/ccg

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(S2 continued)

group	VT	complete context set	group	VT	complete context set
CC <sup>t</sup>	Tvv	Cca/Gcg, Gca/Ccg, acC/gcG, acG/gcC	CC <sup>u</sup>	vvv	acc/gct, act/gcc, cca/tcg, gcc/act
CC <sup>v</sup>	Tvv	Acc/Tcc, ccA/ccT	CC <sup>w</sup>	vvv	aca/acg, aca/gca
CC <sup>x</sup>	TvT	AcC/TcG, AcG/TcC, CcA/GcT, GcA/CcT	CC <sup>y</sup>	Tvv	Acc/Tct, Act/Tcc, ccA/tcT, tcA/ccT
CC <sup>z</sup>	vvv	acg/acg	CC <sup>aa</sup>	tvv	acg/act, act/acg
CC <sup>ab</sup>	tvv	acg/ccg, ccg/acg	CC <sup>ac</sup>	tvv	acg/cct, act/ccg, ccg/act, cct/acg
CC <sup>ad</sup>	Tvv	Aca/Tca, acA/acT	CC <sup>ae</sup>	vvv	acg/gcg, gca/gcg
CC <sup>af</sup>	tvv	acg/gct, act/gcg, gca/tcg, gcg/act	CC <sup>ag</sup>	Tvv	AcG/Tcg, gcA/gcT
CC <sup>ah</sup>	Tvt	Acg/Tct, Act/Tcg, gcA/tcT, tcA/gcT	CC <sup>ai</sup>	vvv	act/act
CC <sup>aj</sup>	tvv	act/cct, cct/act	CC <sup>ak</sup>	vvv	act/gct, gct/act
CC <sup>al</sup>	Tvv	Act/Tct, tcA/tcT	CC <sup>am</sup>	tvv	aca/ccc, acc/cca, cca/acc
CC <sup>an</sup>	tvv	aca/ccg, aca/gcc, acc/gca, cca/acg	CC <sup>ao</sup>	vvv	ccc/ccc
CC <sup>ap</sup>	Tvv	Ccc/Gcc, ccC/ccG	CC <sup>aq</sup>	vvv	ccc/cct, ccc/tcc
CC <sup>ar</sup>	TvT	CcC/GcG, CcG/GcC, GcC/CcG	CC <sup>as</sup>	Tvv	Ccc/Gct, Gcc/Cct, ccC/tcG, ccG/tcC
CC <sup>at</sup>	Tvt	Aca/Tcc, Acc/Tca, acA/ccT, ccA/acT	CC <sup>au</sup>	vvv	ccc/tct, cct/tcc, tcc/cct
CC <sup>av</sup>	vvv	ccg/ccg	CC <sup>aw</sup>	tvv	ccg/cct, cct/ccg
CC <sup>ax</sup>	Tvv	Ccg/Gcg, gcC/gcG	CC <sup>ay</sup>	Tvt	Ccg/Gct, Cct/Gcg, Gcg/Cct, gcC/tcG
CC <sup>az</sup>	vvv	ccg/tcg, gcc/gct	CC <sup>ba</sup>	tvv	ccg/tct, cct/tcg, gcc/tct, tcc/gct
CC <sup>bb</sup>	vvv	cct/cct	CC <sup>bc</sup>	Tvv	Cct/Gct, Gct/Cct
CT <sup>a</sup>	vvv	aca/ata	CT <sup>b</sup>	vvv	aca/gtg, acg/gta, ata/gcg, gca/atg
CT <sup>c</sup>	Tvv	Aca/Ttg, Acg/Tta, Ata/Tcg, acA/gtT, acT/gtA, atA/gcT, gca/atT, gtA/acT	CT <sup>d</sup>	vvv	ccc/ctc
CT <sup>e</sup>	Tvv	Ccc/Gtc, ccC/ctG, ccG/ctC, ctC/ccG	CT <sup>f</sup>	vvv	ccc/ctt, ccc/ttc, cct/ctc, ctc/cct
CT <sup>g</sup>	TvT	CcC/GtG, CcG/GtC, CtC/GcG, GcC/CtG	CT <sup>h</sup>	Tvv	Ccc/Gtt, Cct/Gtc, Ctc/Gct, Gcc/Ctt, Gtc/Cct, ccC/ttG, ccG/ttC, ctC/tcG
CT <sup>i</sup>	vvv	ccc/ttt, cct/ttc, ctc/tct, tcc/ctt	CT <sup>j</sup>	vvv	ccg/ctg, ctg/ccg
CT <sup>k</sup>	tvv	ccg/ctt, cct/ctg, ctg/cct, ctt/ccg	CT <sup>l</sup>	Tvv	Ccg/Gtg, Ctg/Gcg, Gcg/Ctg, gcC/gtG
CT <sup>m</sup>	Tvt	Ccg/Gtt, Cct/Gtg, Ctg/Gct, Ctt/Gcg, Gcg/Ctt, Gct/Ctg, Gtg/Cct, gcC/ttG	CT <sup>n</sup>	vvv	ccg/ttg, ctg/tcg, gcc/gtt, gtc/gct
CT <sup>o</sup>	tvv	ccg/ttt, cct/ttg, ctg/tct, ctt/tcg, gcc/ttt, gtc/tct, tcc/gtt, tcg/ctt	CT <sup>p</sup>	vvv	cct/ctt, ctt/cct
CT <sup>q</sup>	Tvv	Cct/Gtt, Ctt/Gct, Gct/Ctt, Gtt/Cct	CT <sup>r</sup>	TvT	AcA/TtT, AcT/TtA, AtA/TcT, TcA/AtT
CT <sup>s</sup>	vvv	cct/ttt, ctt/tct, tcc/ttt, tct/ctt	CT <sup>t</sup>	vvv	acc/atc, atc/acc
CT <sup>u</sup>	Tvv	acC/atG, acG/atC, atC/acG, atG/acC	CT <sup>v</sup>	tvv	aca/atc, aca/cta, acc/ata, ata/acc
CT <sup>w</sup>	vvv	acc/att, act/atc, atc/act, att/acc	CT <sup>x</sup>	vvv	gcg/gtg
CT <sup>y</sup>	tvv	gcg/gtt, gcg/ttg, gct/gtg, gtg/gct	CT <sup>z</sup>	tvv	gcg/ttt, gct/ttg, gtg/tct, tcg/gtt
CT <sup>aa</sup>	tvv	acc/ctc, atc/ccc, cca/ctc, ccc/atc	CT <sup>ab</sup>	vvv	gct/gtt, gtt/gct
CT <sup>ac</sup>	tvv	gct/ttt, gtt/tct, tcg/ttt, tct/gtt	CT <sup>ad</sup>	Tvt	Cca/Gtc, acC/ctG, acG/ctC, atC/ccG, atG/ccC, ccC/atG, ccG/atC, ctC/acG
CT <sup>ae</sup>	tvv	acc/ctt, act/ctc, atc/cct, att/ccc, cca/ttc, ccc/att, cct/atc, ctc/act	CT <sup>af</sup>	vvv	tct/ttt
CT <sup>ag</sup>	vvv	acc/gtc, atc/gcc, cca/ctg, cta/ccg	CT <sup>ah</sup>	Tvv	Cca/Gtg, Cta/Gcg, Gca/Ctg, acC/gtG, acG/gtC, atC/gcG, atG/gcC, gcC/atG
CT <sup>ai</sup>	vvv	acc/gtt, act/gtc, atc/gct, att/gcc, cca/ttg, cta/tcg, gcc/att, gtc/act	CT <sup>aj</sup>	vvv	aca/atg, aca/gta, acg/ata, ata/acg
CT <sup>ak</sup>	Tvv	Acc/Ttc, Atc/Tcc, ccA/ctT, ctA/ccT	CT <sup>al</sup>	TvT	AcC/TtG, AcG/TtC, AtC/TcG, AtG/TcC, CcA/GtT, CtA/GcT, GcA/CtT, GtA/CcT
CT <sup>am</sup>	Tvv	Acc/Ttt, Act/Ttc, Atc/Tct, Att/Tcc, Tcc/Att, ccA/ttT, ctA/tcT, tcA/ctT	CT <sup>an</sup>	vvv	acg/atg, atg/acg
CT <sup>ao</sup>	tvv	acg/att, act/atg, atg/act, att/acg	CT <sup>ap</sup>	tvv	acg/ctg, atg/ccg, ccg/atg, ctg/acg
CT <sup>aq</sup>	Tvv	Aca/Tta, acA/atT, acT/atA, atA/acT	CT <sup>ar</sup>	tvv	acg/ctt, act/ctg, atg/cct, att/ccg, ccg/att, cct/atg, ctg/act, ctt/acg
CT <sup>as</sup>	vvv	acg/gtg, atg/gcg, gca/gtg, gcg/atg	CT <sup>at</sup>	tvv	acg/gtt, act/gtg, atg/gct, att/gcg, gca/ttg, gcg/att, gct/atg, gtg/act
CT <sup>au</sup>	Tvv	Acg/Ttg, Atg/Tcg, gcA/gtT, gtA/gcT	CT <sup>av</sup>	Tvt	Acg/Ttt, Act/Ttg, Atg/Tct, Att/Tcg, Tcg/Att, gcA/ttT, gtA/tcT, tcA/gtT
CT <sup>aw</sup>	vvv	act/att, att/act	CT <sup>ax</sup>	tvv	act/ctt, att/cct, cct/att, ctt/act
CT <sup>ay</sup>	tvv	aca/ctc, acc/cta, ata/ccc, cca/atc	CT <sup>az</sup>	vvv	act/gtt, att/gct, gct/att, gtt/act
CT <sup>ba</sup>	Tvv	Act/Ttt, Att/Tct, Tct/Att, tcA/ttT	CT <sup>bb</sup>	tvv	aca/ctg, aca/gtc, acc/gta, acg/cta, ata/ccg, ata/gcc, cca/atg, cta/acg
CT <sup>bc</sup>	Tvt	Aca/Ttc, Acc/Tta, Ata/Tcc, acA/ctT, acT/ctA, atA/ccT, ccA/atT, ctA/acT	GG <sup>a</sup>	vvv	aga/aga
GG <sup>b</sup>	vvv	cgt/tgt, tgc/tgt	GG <sup>c</sup>	vvv	aga/ggg, agg/gga, gga/agg
GG <sup>d</sup>	vvv	ggg/ggg	GG <sup>e</sup>	tvv	ggg/ggt, ggg/tgg

(continued on next page)

(S2 continued)

group	VT	complete context set	group	VT	complete context set
GG <sup>f</sup>	Tvv	Aga/Tgg, Agg/Tga, agA/ggT, ggA/agT	GG <sup>g</sup>	tvv	ggg/tgt, ggt/tgg, tgg/ggt
GG <sup>h</sup>	vvv	ggt/ggt	GG <sup>i</sup>	tvv	ggt/tgt, tgg/tgt
GG <sup>j</sup>	vvv	tgt/tgt	GG <sup>k</sup>	TvT	AgA/TgT, AgT/TgA, TgA/AgT
GG <sup>l</sup>	vvv	agc/agc	GG <sup>m</sup>	Tvv	agC/agG, agG/agC
GG <sup>n</sup>	vvv	agc/agt, agt/agc	GG <sup>o</sup>	tvv	aga/agc, aga/cga
GG <sup>p</sup>	tvv	agc/cgc, cga/cgc	GG <sup>q</sup>	Tvt	Cga/Ggc, agC/cgG, agG/cgC, cgC/agG
GG <sup>r</sup>	tvv	agc/cgt, agt/cgc, cga/tgc, cgc/agt	GG <sup>s</sup>	vvv	agc/ggc, cga/cgg
GG <sup>t</sup>	Tvv	Cga/Ggg, Gga/Cgg, agC/ggG, agG/ggC	GG <sup>u</sup>	vvv	agc/ggt, agt/ggc, cga/tgg, ggc/agt
GG <sup>v</sup>	Tvv	Agc/Tgc, cgA/cgT	GG <sup>w</sup>	vvv	aga/agg, aga/gga
GG <sup>x</sup>	TvT	AgC/TgG, AgG/TgC, CgA/GgT, GgA/CgT	GG <sup>y</sup>	Tvv	Agc/Tgt, Agt/Tgc, cgA/tgT, tgA/cgT
GG <sup>z</sup>	vvv	agg/agg	GG <sup>aa</sup>	tvv	agg/agt, agt/agg
GG <sup>ab</sup>	tvv	agg/cgg, cgg/agg	GG <sup>ac</sup>	tvv	agg/cgt, agt/cgg, cgg/agt, cgt/agg
GG <sup>ad</sup>	Tvv	Aga/Tga, agA/agT	GG <sup>ae</sup>	vvv	agg/ggg, gga/ggg
GG <sup>af</sup>	tvv	agg/ggt, agt/ggg, gga/tgg, ggg/agt	GG <sup>ag</sup>	Tvv	Agg/Tgg, ggA/ggT
GG <sup>ah</sup>	Tvt	Agg/Tgt, Agt/Tgg, ggA/tgT, tgA/ggT	GG <sup>ai</sup>	vvv	agt/agt
GG <sup>aj</sup>	tvv	agt/cgt, cgt/agt	GG <sup>ak</sup>	vvv	agt/ggt, ggt/agt
GG <sup>al</sup>	Tvv	Agt/Tgt, tgA/tgT	GG <sup>am</sup>	tvv	aga/cgc, agc/cga, cga/agg
GG <sup>an</sup>	tvv	aga/cgc, aga/ggc, agc/gga, cga/agg	GG <sup>ao</sup>	vvv	cgc/cgc
GG <sup>ap</sup>	Tvv	Cgc/Ggc, cgC/cgG	GG <sup>aq</sup>	vvv	cgc/cgt, cgc/tgc
GG <sup>ar</sup>	TvT	CgC/GgG, CgG/GgC, GgC/CgG	GG <sup>as</sup>	Tvv	Cgc/Ggt, Ggc/Cgt, cgC/tgG, cgG/tgC
GG <sup>at</sup>	Tvt	Aga/Tgc, Agc/Tga, agA/cgT, cgA/agT	GG <sup>au</sup>	vvv	cgc/tgt, cgt/tgc, tgc/cgt
GG <sup>av</sup>	vvv	cgg/cgg	GG <sup>aw</sup>	tvv	cgg/cgt, cgt/cgg
GG <sup>ax</sup>	Tvv	Cgg/Ggg, ggC/ggG	GG <sup>ay</sup>	Tvt	Cgg/Ggt, Cgt/Ggg, Ggg/Cgt, ggC/tgG
GG <sup>az</sup>	vvv	cgg/tgg, ggc/ggt	GG <sup>ba</sup>	tvv	cgg/tgt, cgt/tgg, ggc/tgt, tgc/ggt
GG <sup>bb</sup>	vvv	cgt/cgt	GG <sup>bc</sup>	Tvv	Cgt/Ggt, Ggt/Cgt
GT <sup>a</sup>	vtv	aga/ata	GT <sup>b</sup>	vtv	aga/gtg, agg/gta, ata/ggg, gga/atg
GT <sup>c</sup>	Ttv	Aga/Ttg, Agg/Tta, Ata/Tgg, agA/gtT, agT/gtA, atA/ggT, ggA/atT, gtA/agT	GT <sup>d</sup>	vtv	cgc/ctc
GT <sup>e</sup>	Ttv	Cgc/Gtc, cgC/ctG, cgG/ctC, ctC/cgG	GT <sup>f</sup>	vtv	cgc/ctt, cgc/ttc, cgt/ctc, ctc/cgt
GT <sup>g</sup>	TtT	CgC/GtG, CgG/GtC, CtC/GgG, GgC/CtG	GT <sup>h</sup>	Ttv	Cgc/Gtt, Cgt/Gtc, Ctc/Ggt, Ggc/Ctt, Gtc/Cgt, cgC/ttG, cgG/ttC, ctC/tgG
GT <sup>i</sup>	vtv	cgc/ttt, cgt/ttc, ctc/tgt, tgc/ctt	GT <sup>j</sup>	vtv	cgg/ctg, ctg/cgg
GT <sup>k</sup>	ttv	cgg/ctt, cgt/ctg, ctg/cgt, ctt/cgg	GT <sup>l</sup>	Ttv	Cgg/Gtg, Ctg/Ggg, Ggg/Ctg, ggC/gtG
GT <sup>m</sup>	Ttt	Cgg/Gtt, Cgt/Gtg, Ctg/Ggt, Ctt/Ggg, Ggg/Ctt, Ggt/Ctg, Gtg/Cgt, ggC/ttG	GT <sup>n</sup>	vtv	cgg/ttg, ctg/tgg, ggc/gtt, gtc/ggt
GT <sup>o</sup>	ttv	cgg/ttt, cgt/ttg, ctg/tgt, ctt/tgg, ggc/ttt, gtc/tgt, tgc/gtt, tgg/ctt	GT <sup>p</sup>	vtv	cgt/ctt, ctt/cgt
GT <sup>q</sup>	Ttv	Cgt/Gtt, Ctt/Ggt, Ggt/Ctt, Gtt/Cgt	GT <sup>r</sup>	TtT	AgA/TtT, AgT/TtA, AtA/TgT, TgA/AtT
GT <sup>s</sup>	vtv	cgt/ttt, ctt/tgt, tgc/ttt, tgt/ctt	GT <sup>t</sup>	vtv	agc/atc, atc/agc
GT <sup>u</sup>	Ttv	agC/atG, agG/atC, atC/agG, atG/agC	GT <sup>v</sup>	ttv	aga/atc, aga/cta, agc/ata, ata/agc
GT <sup>w</sup>	vtv	agc/att, agt/atc, atc/agt, att/agc	GT <sup>x</sup>	vtv	ggg/gtg
GT <sup>y</sup>	ttv	ggg/gtt, ggg/ttg, ggt/gtg, gtg/ggt	GT <sup>z</sup>	ttt	ggg/ttt, ggt/ttg, gtg/tgt, tgg/gtt
GT <sup>aa</sup>	ttv	agc/ctc, atc/cgc, cga/ctc, cgc/atc	GT <sup>ab</sup>	vtv	ggt/gtt, gtt/ggt
GT <sup>ac</sup>	ttv	ggt/ttt, gtt/tgt, tgg/ttt, tgt/gtt	GT <sup>ad</sup>	Ttt	Cga/Gtc, agC/ctG, agG/ctC, atC/cgG, atG/cgC, cgC/atG, cgG/atC, ctC/agG
GT <sup>ae</sup>	ttv	agc/ctt, agt/ctc, atc/cgt, att/cgc, cga/ttc, cgc/att, cgt/atc, ctc/agt	GT <sup>af</sup>	vtv	tgt/ttt
GT <sup>ag</sup>	vtv	agc/gtc, atc/ggc, cga/ctg, cta/cgg	GT <sup>ah</sup>	Ttv	Cga/Gtg, Cta/Ggg, Gga/Ctg, agC/gtG, agG/gtC, atC/ggG, atG/ggC, ggC/atG
GT <sup>ai</sup>	vtv	agc/gtt, agt/gtc, atc/ggt, att/ggc, cga/ttg, cta/tgg, ggc/att, gtc/agt	GT <sup>aj</sup>	vtv	aga/atg, aga/gta, agg/ata, ata/agg
GT <sup>ak</sup>	Ttv	Agc/Ttc, Atc/Tgc, cgA/ctT, ctA/cgT	GT <sup>al</sup>	TtT	AgC/TtG, AgG/TtC, AtC/TgG, AtG/TgC, CgA/GtT, CtA/GgT, GgA/CtT, GtA/CgT
GT <sup>am</sup>	Ttv	Agc/Ttt, Agt/Ttc, Atc/Tgt, Att/Tgc, Tgc/Att, cgA/ttT, ctA/tgT, tgA/ctT	GT <sup>an</sup>	vtv	agg/atg, atg/agg
GT <sup>ao</sup>	ttv	agg/att, agt/atg, atg/agt, att/agg	GT <sup>ap</sup>	ttv	agg/ctg, atg/cgg, cgg/atg, ctg/agg
GT <sup>aq</sup>	Ttv	Aga/Tta, agA/atT, agT/atA, atA/agT	GT <sup>ar</sup>	ttt	agg/ctt, agt/ctg, atg/cgt, att/cgg, cgg/att, cgt/atg, ctg/agt, ctt/agg
GT <sup>as</sup>	vtv	agg/gtg, atg/ggg, gga/gtg, ggg/atg	GT <sup>at</sup>	ttv	agg/gtt, agt/gtg, atg/ggt, att/ggg, gga/ttg, ggg/att, ggt/atg, gtg/agt

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(S2 continued)

group	VT	complete context set	group	VT	complete context set
GT <sup>au</sup>	Ttv	Agg/Ttg, Atg/Tgg, ggA/gtT, gtA/ggT	GT <sup>av</sup>	Ttt	Agg/Ttt, Agt/Ttg, Atg/Tgt, Att/Tgg, Tgg/Att, ggA/ttT, gtA/tgT, tgA/gtT
GT <sup>aw</sup>	vtv	agt/att, att/agt	GT <sup>ax</sup>	ttv	agt/ctt, att/cgt, cgt/att, ctt/agt
GT <sup>ay</sup>	ttt	aga/ctc, agc/cta, ata/cgc, cga/atc	GT <sup>az</sup>	vtv	agt/gtt, att/ggt, ggt/att, gtt/agt
GT <sup>ba</sup>	Ttv	Agt/Ttt, Att/Tgt, Tgt/Att, tgA/ttT	GT <sup>bb</sup>	ttv	aga/ctg, aga/gtc, agc/gta, agg/cta, ata/cgg, ata/ggc, cga/atg, cta/agg
GT <sup>bc</sup>	Ttt	Aga/Ttc, Agc/Tta, Ata/Tgc, agA/ctT, agT/ctA, atA/cgT, cgA/atT, ctA/agT	TT <sup>a</sup>	vvv	ata/ata
TT <sup>b</sup>	vvv	ctt/ttt, ttc/ttt	TT <sup>c</sup>	vvv	ata/gtg, atg/gta, gta/atg
TT <sup>d</sup>	vvv	gtg/gtg	TT <sup>e</sup>	tvv	gtg/gtt, gtg/ttg
TT <sup>f</sup>	Tvv	Ata/Ttg, Atg/Tta, atA/gtT, gtA/atT	TT <sup>g</sup>	tvv	gtg/ttt, gtt/ttg, ttg/gtt
TT <sup>h</sup>	vvv	gtt/gtt	TT <sup>i</sup>	tvv	gtt/ttt, ttg/ttt
TT <sup>j</sup>	vvv	ttt/ttt	TT <sup>k</sup>	TvT	AtA/TtT, AtT/TtA, TtA/AtT
TT <sup>l</sup>	vvv	atc/atc	TT <sup>m</sup>	Tvv	atC/atG, atG/atC
TT <sup>n</sup>	vvv	atc/att, att/atc	TT <sup>o</sup>	tvv	ata/atc, ata/cta
TT <sup>p</sup>	tvv	atc/ctc, cta/ctc	TT <sup>q</sup>	Tvt	Cta/Gtc, atC/ctG, atG/ctC, ctC/atG
TT <sup>r</sup>	tvv	atc/ctt, att/ctc, cta/ttc, ctc/att	TT <sup>s</sup>	vvv	atc/gtc, cta/ctg
TT <sup>t</sup>	Tvv	Cta/Gtg, Gta/Ctg, atC/gtG, atG/gtC	TT <sup>u</sup>	vvv	atc/gtt, att/gtc, cta/ttg, gtc/att
TT <sup>v</sup>	Tvv	Atc/Ttc, ctA/ctT	TT <sup>w</sup>	vvv	ata/atg, ata/gta
TT <sup>x</sup>	TvT	AtC/TtG, AtG/TtC, CtA/GtT, GtA/CtT	TT <sup>y</sup>	Tvv	Atc/Ttt, Att/Ttc, ctA/ttT, ttA/ctT
TT <sup>z</sup>	vvv	atg/atg	TT <sup>aa</sup>	tvv	atg/att, att/atg
TT <sup>ab</sup>	tvv	atg/ctg, ctg/atg	TT <sup>ac</sup>	tvv	atg/ctt, att/ctg, ctg/att, ctt/atg
TT <sup>ad</sup>	Tvv	Ata/Tta, atA/atT	TT <sup>ae</sup>	vvv	atg/gtg, gta/gtg
TT <sup>af</sup>	tvv	atg/gtt, att/gtg, gta/ttg, gtg/att	TT <sup>ag</sup>	Tvv	Atg/Ttg, gtA/gtT
TT <sup>ah</sup>	Tvt	Atg/Ttt, Att/Ttg, gtA/ttT, ttA/gtT	TT <sup>ai</sup>	vvv	att/att
TT <sup>aj</sup>	tvv	att/ctt, ctt/att	TT <sup>ak</sup>	vvv	att/gtt, gtt/att
TT <sup>al</sup>	Tvv	Att/Ttt, ttA/ttT	TT <sup>am</sup>	tvt	ata/ctc, atc/cta, cta/atc
TT <sup>an</sup>	tvv	ata/ctg, ata/gtc, atc/gta, cta/atg	TT <sup>ao</sup>	vvv	ctc/ctc
TT <sup>ap</sup>	Tvv	Ctc/Gtc, ctC/ctG	TT <sup>aq</sup>	vvv	ctc/ctt, ctc/ttc
TT <sup>ar</sup>	TvT	CtC/GtG, CtG/GtC, GtC/CtG	TT <sup>as</sup>	Tvv	Ctc/Gtt, Gtc/Ctt, ctC/ttG, ctG/ttC
TT <sup>at</sup>	Tvt	Ata/Ttc, Atc/Tta, atA/ctT, ctA/atT	TT <sup>au</sup>	vvv	ctc/ttt, ctt/ttc, ttc/ctt
TT <sup>av</sup>	vvv	ctg/ctg	TT <sup>aw</sup>	tvv	ctg/ctt, ctt/ctg
TT <sup>ax</sup>	Tvv	Ctg/Gtg, gtC/gtG	TT <sup>ay</sup>	Tvt	Ctg/Gtt, Ctt/Gtg, Gtg/Ctt, gtC/ttG
TT <sup>az</sup>	vvv	ctg/ttg, gtc/gtt	TT <sup>ba</sup>	tvv	ctg/ttt, ctt/ttg, gtc/ttt, ttc/gtt
TT <sup>bb</sup>	vvv	ctt/ctt	TT <sup>bc</sup>	Tvv	Ctt/Gtt, Gtt/Ctt

Table S3. Stacking potentials  $k$  for context dependent nearest-neighbours (CDNN) in eV/nm<sup>2</sup>, grouped in terms of the context independent nearest-neighbours (CINN). For each CDNN an example trimer or tetramer context where it can occur is shown. Also shown are the average  $\langle k \rangle$  and standard deviation  $\sigma(k)$  for each CINN group. CDNN stacking parameters that are lying outside  $\langle k \rangle \pm 2\sigma(k)$  are highlighted in gray. Hyperlinks, in red, lead to the corresponding Morse potentials of table S6.

CINN	$\langle k \rangle \pm \sigma(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$		
AA-AA	9.83 $\pm$ 1.6	<a href="#">AA<sup>aa</sup>-AA<sup>ad</sup></a>	[gaaA/taaT]	8.17	<a href="#">AA<sup>a</sup>-AA<sup>ad</sup></a>	[aaaA/aaaT]	10.5	<a href="#">AA<sup>aa</sup>-AA<sup>m</sup></a>	[gaaC/taaG]	11.5		
		<a href="#">AA<sup>ad</sup>-AA<sup>ad</sup></a>	[AaaA/TaaT]	7.65	<a href="#">AA<sup>ad</sup>-AA<sup>ai</sup></a>	[Aaat/Taat]	9.97	<a href="#">AA<sup>ad</sup>-AA<sup>l</sup></a>	[Aaac/Taac]	9.72		
		<a href="#">AA<sup>ad</sup>-AA<sup>m</sup></a>	[AaaC/TaaG]	9.90	<a href="#">AA<sup>ad</sup>-AA<sup>n</sup></a>	[Aaac/Taat]	10.7	<a href="#">AA<sup>ad</sup>-AA<sup>o</sup></a>	[Aaaa/Taac]	9.20		
		<a href="#">AA<sup>ad</sup>-AA<sup>w</sup></a>	[Aaaa/Taag]	10.2	<a href="#">AA<sup>ad</sup>-AA<sup>z</sup></a>	[Aaag/Taag]	9.98	<a href="#">AA<sup>ai</sup>-AA<sup>m</sup></a>	[taaC/taaG]	11.2		
		<a href="#">AA<sup>a</sup>-AA<sup>m</sup></a>	[aaaC/aaaG]	8.01	<a href="#">AA<sup>l</sup>-AA<sup>m</sup></a>	[caaC/caaG]	9.88	<a href="#">AA<sup>m</sup>-AA<sup>m</sup></a>	[CaaC/GaaG]	8.11		
		<a href="#">AA<sup>m</sup>-AA<sup>n</sup></a>	[Caac/Gaat]	8.34	<a href="#">AA<sup>m</sup>-AA<sup>o</sup></a>	[Caaa/Gaac]	7.71	<a href="#">AA<sup>m</sup>-AA<sup>w</sup></a>	[Caaa/Gaag]	12.8		
		<a href="#">AA<sup>m</sup>-AA<sup>z</sup></a>	[Caag/Gaag]	13.4								
		Summary for CDNN AA-AA: $k_{\min}=7.65$ $k_{\max}=13.4$ $\langle k \rangle=9.8$ $\sigma(k)=1.6$										
		AA-AC	3.86 $\pm$ 3.0	<a href="#">AA<sup>ab</sup>-AC<sup>aq</sup></a>	[gaaA/gacT]	2.55	<a href="#">AA<sup>ab</sup>-AC<sup>u</sup></a>	[gaaC/gacG]	2.49	<a href="#">AA<sup>ac</sup>-AC<sup>aq</sup></a>	[gaaA/tacT]	2.70
				<a href="#">AA<sup>ac</sup>-AC<sup>u</sup></a>	[gaaC/tacG]	3.58	<a href="#">AA<sup>aj</sup>-AC<sup>aq</sup></a>	[taaA/tacT]	3.07	<a href="#">AA<sup>aj</sup>-AC<sup>u</sup></a>	[taaC/tacG]	2.71
<a href="#">AA<sup>am</sup>-AC<sup>aq</sup></a>	[aaaA/cacT]			3.01	<a href="#">AA<sup>am</sup>-AC<sup>u</sup></a>	[aaaC/cacG]	3.03	<a href="#">AA<sup>an</sup>-AC<sup>aq</sup></a>	[aaaA/gacT]	3.50		
<a href="#">AA<sup>an</sup>-AC<sup>u</sup></a>	[aaaC/gacG]			2.68	<a href="#">AA<sup>at</sup>-AC<sup>a</sup></a>	[Aaaa/Taca]	2.87	<a href="#">AA<sup>at</sup>-AC<sup>aj</sup></a>	[Aaaa/Tacg]	2.89		
<a href="#">AA<sup>at</sup>-AC<sup>an</sup></a>	[Aaag/Tacg]			2.49	<a href="#">AA<sup>at</sup>-AC<sup>ao</sup></a>	[Aaag/Tact]	3.05	<a href="#">AA<sup>at</sup>-AC<sup>aq</sup></a>	[AaaA/Tact]	3.47		
<a href="#">AA<sup>at</sup>-AC<sup>aw</sup></a>	[Aaat/Tact]			2.75	<a href="#">AA<sup>at</sup>-AC<sup>t</sup></a>	[Aaac/Tacc]	3.15	<a href="#">AA<sup>at</sup>-AC<sup>v</sup></a>	[AaaC/TacG]	2.93		
<a href="#">AA<sup>at</sup>-AC<sup>v</sup></a>	[Aaaa/Tacc]			2.58	<a href="#">AA<sup>at</sup>-AC<sup>w</sup></a>	[Aaac/Tact]	2.60	<a href="#">AA<sup>o</sup>-AC<sup>aq</sup></a>	[aaaA/aacT]	3.32		
<a href="#">AA<sup>o</sup>-AC<sup>u</sup></a>	[aaaC/aacG]			2.79	<a href="#">AA<sup>p</sup>-AC<sup>aq</sup></a>	[caaA/cacT]	3.28	<a href="#">AA<sup>p</sup>-AC<sup>u</sup></a>	[caaC/cacG]	3.19		
<a href="#">AA<sup>q</sup>-AC<sup>a</sup></a>	[Caaa/Gaca]			2.76	<a href="#">AA<sup>q</sup>-AC<sup>aj</sup></a>	[Caaa/Gacg]	2.75	<a href="#">AA<sup>q</sup>-AC<sup>an</sup></a>	[Caag/Gacg]	3.44		
<a href="#">AA<sup>q</sup>-AC<sup>ao</sup></a>	[Caag/Gact]			2.77	<a href="#">AA<sup>q</sup>-AC<sup>aq</sup></a>	[CaaA/GacT]	11.4	<a href="#">AA<sup>q</sup>-AC<sup>aw</sup></a>	[Caat/Gact]	3.44		
<a href="#">AA<sup>q</sup>-AC<sup>t</sup></a>	[Caac/Gacc]			3.10	<a href="#">AA<sup>q</sup>-AC<sup>v</sup></a>	[CaaC/GacG]	3.47	<a href="#">AA<sup>q</sup>-AC<sup>v</sup></a>	[Caaa/Gacc]	11.1		
<a href="#">AA<sup>q</sup>-AC<sup>w</sup></a>	[Caac/Gact]			17.5	<a href="#">AA<sup>r</sup>-AC<sup>aq</sup></a>	[caaA/tacT]	2.80	<a href="#">AA<sup>r</sup>-AC<sup>u</sup></a>	[caaC/tacG]	3.69		
Summary for CDNN AA-AC: $k_{\min}=2.49$ $k_{\max}=17.5$ $\langle k \rangle=3.9$ $\sigma(k)=3.0$												
AA-AG	7.52 $\pm$ 2.8			<a href="#">AA<sup>ae</sup>-AG<sup>aq</sup></a>	[gaaA/gagT]	5.26	<a href="#">AA<sup>ae</sup>-AG<sup>u</sup></a>	[gaaC/gagG]	6.84	<a href="#">AA<sup>af</sup>-AG<sup>aq</sup></a>	[gaaA/tagT]	6.78
				<a href="#">AA<sup>af</sup>-AG<sup>u</sup></a>	[gaaC/tagG]	6.10	<a href="#">AA<sup>ak</sup>-AG<sup>aq</sup></a>	[taaA/tagT]	6.36	<a href="#">AA<sup>ak</sup>-AG<sup>u</sup></a>	[taaC/tagG]	6.51
		<a href="#">AA<sup>an</sup>-AG<sup>aq</sup></a>	[aaaA/cagT]	5.39	<a href="#">AA<sup>an</sup>-AG<sup>u</sup></a>	[aaaC/cagG]	6.02	<a href="#">AA<sup>c</sup>-AG<sup>aq</sup></a>	[aaaA/gagT]	9.13		
		<a href="#">AA<sup>c</sup>-AG<sup>u</sup></a>	[aaaC/gagG]	7.51	<a href="#">AA<sup>f</sup>-AG<sup>a</sup></a>	[Aaaa/Taga]	7.93	<a href="#">AA<sup>f</sup>-AG<sup>aj</sup></a>	[Aaaa/Tagg]	10.7		
		<a href="#">AA<sup>f</sup>-AG<sup>an</sup></a>	[Aaag/Tagg]	7.05	<a href="#">AA<sup>f</sup>-AG<sup>ao</sup></a>	[Aaag/Tagt]	13.0	<a href="#">AA<sup>f</sup>-AG<sup>aq</sup></a>	[AaaA/TagT]	9.01		
		<a href="#">AA<sup>f</sup>-AG<sup>aw</sup></a>	[Aaat/Tagt]	20.3	<a href="#">AA<sup>f</sup>-AG<sup>t</sup></a>	[Aaac/Tagc]	5.90	<a href="#">AA<sup>f</sup>-AG<sup>u</sup></a>	[AaaC/TagG]	6.38		
		<a href="#">AA<sup>f</sup>-AG<sup>v</sup></a>	[Aaaa/Tagc]	11.3	<a href="#">AA<sup>f</sup>-AG<sup>w</sup></a>	[Aaac/Tagt]	11.0	<a href="#">AA<sup>s</sup>-AG<sup>aq</sup></a>	[caaA/cagT]	7.18		
		<a href="#">AA<sup>s</sup>-AG<sup>u</sup></a>	[caaC/cagG]	5.99	<a href="#">AA<sup>t</sup>-AG<sup>a</sup></a>	[Caaa/Gaga]	5.62	<a href="#">AA<sup>t</sup>-AG<sup>aj</sup></a>	[Caaa/Gagg]	8.92		
		<a href="#">AA<sup>t</sup>-AG<sup>an</sup></a>	[Caag/Gagg]	5.76	<a href="#">AA<sup>t</sup>-AG<sup>ao</sup></a>	[Caag/Gagt]	5.74	<a href="#">AA<sup>t</sup>-AG<sup>aq</sup></a>	[CaaA/GagT]	5.62		
		<a href="#">AA<sup>t</sup>-AG<sup>aw</sup></a>	[Caat/Gagt]	7.35	<a href="#">AA<sup>t</sup>-AG<sup>t</sup></a>	[Caac/Gagc]	5.63	<a href="#">AA<sup>t</sup>-AG<sup>v</sup></a>	[CaaC/GagG]	5.98		
		<a href="#">AA<sup>t</sup>-AG<sup>v</sup></a>	[Caaa/Gagc]	7.67	<a href="#">AA<sup>t</sup>-AG<sup>w</sup></a>	[Caac/Gagt]	6.12	<a href="#">AA<sup>u</sup>-AG<sup>aq</sup></a>	[caaA/tagT]	5.36		
		<a href="#">AA<sup>u</sup>-AG<sup>u</sup></a>	[caaC/tagG]	5.33	<a href="#">AA<sup>w</sup>-AG<sup>aq</sup></a>	[aaaA/aagT]	7.18	<a href="#">AA<sup>w</sup>-AG<sup>u</sup></a>	[aaaC/aagG]	6.84		
		Summary for CDNN AA-AG: $k_{\min}=5.33$ $k_{\max}=20.3$ $\langle k \rangle=7.5$ $\sigma(k)=2.8$										
		AA-AT	2.41 $\pm$ 0.75	<a href="#">AA<sup>ad</sup>-AT</a>	[Taa/Aaa]	2.33	<a href="#">AA<sup>ag</sup>-AT</a>	[Tag/Aag]	1.74	<a href="#">AA<sup>ah</sup>-AT</a>	[Tag/Aat]	1.53
<a href="#">AA<sup>aj</sup>-AT</a>	[Tat/Aat]			1.97	<a href="#">AA<sup>at</sup>-AT</a>	[Taa/Aac]	3.15	<a href="#">AA<sup>f</sup>-AT</a>	[Taa/Aag]	1.39		
<a href="#">AA<sup>k</sup>-AT</a>	[AaA/TaT]			3.76	<a href="#">AA<sup>v</sup>-AT</a>	[TAc/Aac]	3.23	<a href="#">AA<sup>x</sup>-AT</a>	[CaA/GaT]	2.33		
<a href="#">AA<sup>y</sup>-AT</a>	[TAc/Aat]			2.72								
Summary for CDNN AA-AT: $k_{\min}=1.39$ $k_{\max}=3.76$ $\langle k \rangle=2.4$ $\sigma(k)=0.75$												
AA-CA	3.55 $\pm$ 0.43	<a href="#">AA<sup>ab</sup>-CA<sup>aq</sup></a>	[gacA/gaaT]	2.98	<a href="#">AA<sup>ab</sup>-CA<sup>u</sup></a>	[gacC/gaaG]	3.96	<a href="#">AA<sup>ac</sup>-CA<sup>aq</sup></a>	[gacA/taaT]	3.71		
		<a href="#">AA<sup>ac</sup>-CA<sup>u</sup></a>	[gacC/taaG]	4.03	<a href="#">AA<sup>aj</sup>-CA<sup>aq</sup></a>	[tacA/taaT]	3.73	<a href="#">AA<sup>aj</sup>-CA<sup>u</sup></a>	[tacC/taaG]	4.14		
		<a href="#">AA<sup>am</sup>-CA<sup>aq</sup></a>	[aacA/caaT]	3.59	<a href="#">AA<sup>am</sup>-CA<sup>u</sup></a>	[aacC/caaG]	3.48	<a href="#">AA<sup>an</sup>-CA<sup>aq</sup></a>	[aacA/gaaT]	3.51		
		<a href="#">AA<sup>an</sup>-CA<sup>u</sup></a>	[aacC/gaaG]	3.38	<a href="#">AA<sup>at</sup>-CA<sup>a</sup></a>	[Aaca/Taaa]	4.11	<a href="#">AA<sup>at</sup>-CA<sup>aj</sup></a>	[Aaca/Taag]	3.98		
		<a href="#">AA<sup>at</sup>-CA<sup>an</sup></a>	[Aacg/Taag]	4.12	<a href="#">AA<sup>at</sup>-CA<sup>ao</sup></a>	[Aacg/Taat]	4.10	<a href="#">AA<sup>at</sup>-CA<sup>aq</sup></a>	[AacA/TaaT]	3.83		
		<a href="#">AA<sup>at</sup>-CA<sup>aw</sup></a>	[Aact/Taat]	2.66	<a href="#">AA<sup>at</sup>-CA<sup>t</sup></a>	[Aacc/Taac]	3.45	<a href="#">AA<sup>at</sup>-CA<sup>u</sup></a>	[AacC/TaaG]	3.64		
		<a href="#">AA<sup>at</sup>-CA<sup>v</sup></a>	[Aaca/Taac]	3.31	<a href="#">AA<sup>at</sup>-CA<sup>w</sup></a>	[Aacc/Taat]	3.13	<a href="#">AA<sup>o</sup>-CA<sup>aq</sup></a>	[aacA/aaaT]	3.13		
		<a href="#">AA<sup>o</sup>-CA<sup>u</sup></a>	[aacC/aaaG]	4.05	<a href="#">AA<sup>p</sup>-CA<sup>aq</sup></a>	[cacA/caaT]	3.37	<a href="#">AA<sup>p</sup>-CA<sup>u</sup></a>	[cacC/caaG]	3.32		

(continued on next page)

(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$AA^q-CA^a$	[Caca/Gaaa]	4.02	$AA^q-CA^{aj}$	[Caca/Gaag]	3.01	$AA^q-CA^{an}$	[Cacg/Gaag]	3.43
		$AA^q-CA^{ao}$	[Cacg/Gaat]	3.79	$AA^q-CA^{aq}$	[CacA/Gaat]	4.25	$AA^q-CA^{aw}$	[Cact/Gaat]	2.99
		$AA^q-CA^t$	[Cacc/Gaac]	2.96	$AA^q-CA^u$	[Cacc/GaaG]	2.95	$AA^q-CA^v$	[Caca/Gaac]	2.80
		$AA^q-CA^w$	[Cacc/Gaat]	3.73	$AA^r-CA^{aq}$	[cacA/taaT]	3.32	$AA^r-CA^u$	[cacC/taaG]	3.65
		Summary for CDNN AA-CA: $k_{\min}=2.66$ $k_{\max}=4.25$ $\langle k \rangle=3.5$ $\sigma(k)=0.43$								
AA-CC	$0.715 \pm 0.13$	$AA^{ao}-CC^{ad}$	[cacA/cacT]	0.0946	$AA^{ao}-CC^m$	[cacC/cacG]	0.686	$AA^{ap}-CC^a$	[Caca/Gaca]	0.606
		$AA^{ap}-CC^{aa}$	[Cacg/Gact]	0.743	$AA^{ap}-CC^{ad}$	[CacA/Gact]	0.851	$AA^{ap}-CC^{ai}$	[Cact/Gact]	0.663
		$AA^{ap}-CC^l$	[Cacc/Gacc]	0.725	$AA^{ap}-CC^m$	[Cacc/GacG]	0.759	$AA^{ap}-CC^n$	[Cacc/Gact]	0.797
		$AA^{ap}-CC^o$	[Caca/Gacc]	0.778	$AA^{ap}-CC^w$	[Caca/Gacg]	0.707	$AA^{ap}-CC^z$	[Cacg/Gacg]	0.890
		$AA^{aq}-CC^{ad}$	[cacA/tacT]	0.627	$AA^{aq}-CC^m$	[cacC/tacG]	0.756	$AA^{av}-CC^{ad}$	[gacA/gacT]	0.718
		$AA^{av}-CC^m$	[gacC/gacG]	0.624	$AA^{aw}-CC^{ad}$	[gacA/tacT]	0.620	$AA^{aw}-CC^m$	[gacC/tacG]	0.629
		$AA^{bb}-CC^{ad}$	[tacA/tacT]	0.696	$AA^{bb}-CC^m$	[tacC/tacG]	0.703	$AA^l-CC^{ad}$	[aacA/aacT]	0.635
		$AA^l-CC^m$	[aacC/aacG]	0.736	$AA^p-CC^{ad}$	[aacA/cacT]	0.655	$AA^p-CC^m$	[aacC/cacG]	0.863
		$AA^s-CC^{ad}$	[aacA/gacT]	0.900	$AA^s-CC^m$	[aacC/gacG]	0.717	$AA^v-CC^a$	[Aaca/Taca]	0.867
		$AA^v-CC^{aa}$	[Aacg/Tact]	0.668	$AA^v-CC^{ad}$	[AacA/TacT]	0.641	$AA^v-CC^{ai}$	[Aacc/Tact]	0.799
		$AA^v-CC^l$	[Aacc/Tacc]	0.719	$AA^v-CC^m$	[Aacc/TacG]	0.741	$AA^v-CC^n$	[Aacc/Tact]	0.801
		$AA^v-CC^o$	[Aaca/Tacc]	0.850	$AA^v-CC^w$	[Aaca/Tacg]	0.807	$AA^v-CC^z$	[Aacg/Tacg]	0.667
		Summary for CDNN AA-CC: $k_{\min}=0.606$ $k_{\max}=0.900$ $\langle k \rangle=0.71$ $\sigma(k)=0.13$								
AA-CG	$0.931 \pm 0.41$	$AA^{ap}-CG$	[Gac/Cac]	0.825	$AA^{ar}-CG$	[CaC/GaG]	0.435	$AA^{as}-CG$	[Gac/Cat]	0.942
		$AA^{ax}-CG$	[Gag/Cag]	0.955	$AA^{ay}-CG$	[Gag/Cat]	1.00	$AA^{bc}-CG$	[Gat/Cat]	0.700
		$AA^m-CG$	[Gaa/Caa]	0.781	$AA^q-CG$	[Gaa/Cac]	0.811	$AA^t-CG$	[Gaa/Cag]	0.783
		$AA^x-CG$	[AaC/TaG]	2.08						
		Summary for CDNN AA-CG: $k_{\min}=0.435$ $k_{\max}=2.08$ $\langle k \rangle=0.93$ $\sigma(k)=0.41$								
AA-CT	$2.07 \pm 0.25$	$AA^{aq}-CT^{aq}$	[cacA/catT]	1.72	$AA^{aq}-CT^u$	[cacC/catG]	2.11	$AA^{as}-CT^a$	[Caca/Gata]	2.06
		$AA^{as}-CT^{aj}$	[Caca/gatg]	2.00	$AA^{as}-CT^{an}$	[Cacg/Gatg]	2.28	$AA^{as}-CT^{ao}$	[Cacg/Gatt]	2.11
		$AA^{as}-CT^{aq}$	[CacA/GatT]	1.77	$AA^{as}-CT^{aw}$	[Cact/Gatt]	1.64	$AA^{as}-CT^t$	[Cacc/Gatc]	2.39
		$AA^{as}-CT^u$	[CacC/GatG]	1.75	$AA^{as}-CT^v$	[Caca/Gatc]	2.05	$AA^{as}-CT^w$	[Cacc/Gatt]	2.40
		$AA^{au}-CT^{aq}$	[cacA/tatT]	2.13	$AA^{au}-CT^u$	[cacC/tatG]	2.02	$AA^{az}-CT^{aq}$	[gacA/gatT]	1.69
		$AA^{az}-CT^u$	[gacC/gatG]	1.82	$AA^{ba}-CT^{aq}$	[gacA/tatT]	1.80	$AA^b-CT^a$	[tacA/tatT]	2.47
		$AA^{ba}-CT^u$	[gacC/tatG]	1.80	$AA^b-CT^u$	[tacC/tatG]	2.41	$AA^n-CT^{aq}$	[aacA/aatT]	2.30
		$AA^n-CT^u$	[aacC/aatG]	2.18	$AA^r-CT^{aq}$	[aacA/catT]	1.96	$AA^r-CT^u$	[aacC/catG]	2.08
		$AA^u-CT^{aq}$	[aacA/gatT]	2.21	$AA^u-CT^u$	[aacC/gatG]	2.37	$AA^y-CT^a$	[Aaca/Tata]	2.36
		$AA^y-CT^{aj}$	[Aaca/Tatg]	2.38	$AA^y-CT^{an}$	[Aacg/Tatg]	1.70	$AA^y-CT^{ao}$	[Aacc/Tatt]	2.13
		$AA^y-CT^{aq}$	[AacA/TatT]	1.79	$AA^y-CT^{aw}$	[Aact/Tatt]	2.29	$AA^y-CT^t$	[Aacc/Tatc]	2.18
		$AA^y-CT^u$	[AacC/TatG]	1.79	$AA^y-CT^v$	[Aaca/Tatc]	1.97	$AA^y-CT^w$	[Aacc/Tatt]	2.33
		Summary for CDNN AA-CT: $k_{\min}=1.64$ $k_{\max}=2.47$ $\langle k \rangle=2.1$ $\sigma(k)=0.25$								
AA-GA	$3.48 \pm 0.83$	$AA^{ae}-GA^{aq}$	[gagA/gaaT]	3.44	$AA^{ae}-GA^u$	[gagC/gaaG]	3.51	$AA^{af}-GA^{aq}$	[gagA/taaT]	2.87
		$AA^{af}-GA^u$	[gagC/taaG]	3.56	$AA^{ak}-GA^{aq}$	[tagA/taaT]	3.30	$AA^{ak}-GA^u$	[tagC/taaG]	2.60
		$AA^{an}-GA^{aq}$	[aagA/caaT]	3.58	$AA^{an}-GA^u$	[aagC/caaG]	2.59	$AA^c-GA^{aq}$	[aagA/gaaT]	3.16
		$AA^c-GA^u$	[aagC/gaaG]	2.93	$AA^f-GA^a$	[Aaga/Taaa]	3.81	$AA^f-GA^{aj}$	[Aaga/Taag]	3.86
		$AA^f-GA^{an}$	[Aagg/Taag]	3.25	$AA^f-GA^{ao}$	[Aagg/Taat]	2.58	$AA^f-GA^{aq}$	[AagA/TaaT]	2.71
		$AA^f-GA^{aw}$	[Aagt/Taat]	2.63	$AA^f-GA^t$	[Aagc/Taac]	3.93	$AA^f-GA^u$	[AagC/TaaG]	5.03
		$AA^f-GA^v$	[Aaga/Taac]	2.96	$AA^f-GA^w$	[Aagc/Taat]	3.92	$AA^s-GA^{aq}$	[cagA/caaT]	2.73
		$AA^s-GA^u$	[cagC/caaG]	3.23	$AA^t-GA^a$	[Caga/Gaaa]	3.61	$AA^t-GA^{aj}$	[Caga/Gaag]	3.73
		$AA^t-GA^{an}$	[Cagg/Gaag]	3.39	$AA^t-GA^{ao}$	[Cagg/Gaat]	3.25	$AA^t-GA^{aq}$	[CagA/GaaT]	7.39
		$AA^t-GA^{aw}$	[Cagt/Gaat]	3.33	$AA^t-GA^t$	[Cagc/Gaac]	3.72	$AA^t-GA^u$	[CagC/GaaG]	3.62
		$AA^t-GA^v$	[Caga/Gaac]	3.89	$AA^t-GA^w$	[Cagc/Gaat]	3.06	$AA^u-GA^{aq}$	[cagA/taaT]	3.14
		$AA^u-GA^u$	[cagC/taaG]	3.72	$AA^w-GA^{aq}$	[aagA/aaaT]	3.73	$AA^w-GA^u$	[aagC/aaaG]	3.37
		Summary for CDNN AA-GA: $k_{\min}=2.58$ $k_{\max}=7.39$ $\langle k \rangle=3.5$ $\sigma(k)=0.83$								
AA-GC	$1.26 \pm 0.49$	$AA^{ap}-GC$	[Cac/Gac]	0.305	$AA^{ar}-GC$	[Gag/CaC]	1.64	$AA^{as}-GC$	[Cac/Gat]	0.650
		$AA^{ax}-GC$	[Cag/Gag]	1.71	$AA^{ay}-GC$	[Cag/Gat]	1.83	$AA^{bc}-GC$	[Cat/Gat]	1.26
		$AA^m-GC$	[Caa/Gaa]	1.33	$AA^q-GC$	[Caa/Gac]	0.791	$AA^t-GC$	[Caa/Gag]	1.63
		$AA^x-GC$	[AaG/TaC]	1.49						

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
Summary for CDNN AA-GC: $k_{\min}=0.650$ $k_{\max}=1.83$ $\langle k \rangle=1.3$ $\sigma(k)=0.49$										
AA-GG	$2.84 \pm 0.28$	$AA^{ab}\text{-GG}^{ad}$	[aagA/cagT]	3.10	$AA^{ab}\text{-GG}^m$	[aagC/cagG]	2.73	$AA^{ae}\text{-GG}^{ad}$	[aagA/gagT]	3.18
		$AA^{ae}\text{-GG}^m$	[aagC/gagG]	2.92	$AA^{ag}\text{-GG}^a$	[Aaga/Taga]	3.09	$AA^{ag}\text{-GG}^{aa}$	[Aagg/Tagt]	2.97
		$AA^{ag}\text{-GG}^{ad}$	[AagA/TagT]	2.97	$AA^{ag}\text{-GG}^{ai}$	[Aagt/Tagt]	3.15	$AA^{ag}\text{-GG}^l$	[Aagc/Tagc]	2.48
		$AA^{ag}\text{-GG}^m$	[AagC/TagG]	2.56	$AA^{ag}\text{-GG}^n$	[AagC/TagT]	2.70	$AA^{ag}\text{-GG}^o$	[Aaga/Tagc]	2.32
		$AA^{ag}\text{-GG}^w$	[Aaga/Tagg]	3.17	$AA^{ag}\text{-GG}^z$	[Aagg/Tagg]	2.58	$AA^{av}\text{-GG}^{ad}$	[cagA/cagT]	2.37
		$AA^{av}\text{-GG}^m$	[cagC/cagG]	2.99	$AA^{ax}\text{-GG}^a$	[Caga/Gaga]	2.75	$AA^{ax}\text{-GG}^{aa}$	[Cagg/Gagt]	2.89
		$AA^{ax}\text{-GG}^{ad}$	[CagA/GagT]	2.66	$AA^{ax}\text{-GG}^{ai}$	[Cagt/Gagt]	2.75	$AA^{ax}\text{-GG}^l$	[Cagc/Gagc]	2.71
		$AA^{ax}\text{-GG}^m$	[CagC/GagG]	2.71	$AA^{ax}\text{-GG}^n$	[Cagc/Gagt]	3.14	$AA^{ax}\text{-GG}^o$	[Caga/Gagc]	3.31
		$AA^{ax}\text{-GG}^w$	[Caga/Gagg]	3.07	$AA^{ax}\text{-GG}^z$	[Cagg/Gagg]	3.41	$AA^{az}\text{-GG}^{ad}$	[cagA/tagT]	2.65
		$AA^{az}\text{-GG}^m$	[cagC/tagG]	3.25	$AA^d\text{-GG}^{ad}$	[gagA/gagT]	2.97	$AA^d\text{-GG}^m$	[gagC/gagG]	2.35
		$AA^e\text{-GG}^{ad}$	[gagA/tagT]	2.48	$AA^e\text{-GG}^m$	[gagC/tagG]	2.73	$AA^h\text{-GG}^{ad}$	[tagA/tagT]	2.61
		$AA^h\text{-GG}^m$	[tagC/tagG]	3.14	$AA^z\text{-GG}^{ad}$	[aagA/aagT]	2.72	$AA^z\text{-GG}^m$	[aagC/aagG]	2.67
Summary for CDNN AA-GG: $k_{\min}=2.32$ $k_{\max}=3.41$ $\langle k \rangle=2.8$ $\sigma(k)=0.28$										
AA-GT	$5.07 \pm 2.0$	$AA^{aa}\text{-GT}^{aq}$	[aagA/aatT]	4.02	$AA^{aa}\text{-GT}^u$	[aagC/aatG]	4.25	$AA^{ac}\text{-GT}^{aq}$	[aagA/catT]	5.45
		$AA^{ac}\text{-GT}^u$	[aagC/catG]	4.34	$AA^{af}\text{-GT}^{aq}$	[aagA/gatT]	4.61	$AA^{af}\text{-GT}^u$	[aagC/gatG]	3.88
		$AA^{ah}\text{-GT}^a$	[Aaga/Tata]	4.78	$AA^{ah}\text{-GT}^{aj}$	[Aaga/Tagt]	4.51	$AA^{ah}\text{-GT}^{an}$	[Aagg/Tagt]	5.27
		$AA^{ah}\text{-GT}^{ao}$	[Aagg/Tatt]	4.07	$AA^{ah}\text{-GT}^{aq}$	[AagA/TatT]	4.01	$AA^{ah}\text{-GT}^{aw}$	[Aagt/Tatt]	4.98
		$AA^{ah}\text{-GT}^t$	[AagC/Tatc]	15.2	$AA^{ah}\text{-GT}^u$	[AagC/TatG]	5.50	$AA^{ah}\text{-GT}^v$	[Aaga/Tatc]	4.34
		$AA^{ah}\text{-GT}^w$	[AagC/Tatt]	3.86	$AA^{aw}\text{-GT}^{aq}$	[cagA/catT]	4.14	$AA^{aw}\text{-GT}^u$	[cagC/catG]	4.30
		$AA^{ay}\text{-GT}^a$	[Caga/Gata]	4.44	$AA^{ay}\text{-GT}^{aj}$	[Caga/Gatg]	9.80	$AA^{ay}\text{-GT}^{an}$	[Cagg/Gatg]	5.31
		$AA^{ay}\text{-GT}^{ao}$	[Cagg/Gatt]	4.42	$AA^{ay}\text{-GT}^{aq}$	[CagA/GatT]	4.23	$AA^{ay}\text{-GT}^{aw}$	[Cagt/Gatt]	5.56
		$AA^{ay}\text{-GT}^t$	[Cagc/Gatc]	4.50	$AA^{ay}\text{-GT}^u$	[CagC/GatG]	5.29	$AA^{ay}\text{-GT}^v$	[Caga/Gatc]	4.49
		$AA^{ay}\text{-GT}^w$	[Cagc/Gatt]	4.48	$AA^{ba}\text{-GT}^{aq}$	[cagA/tatT]	5.44	$AA^{ba}\text{-GT}^u$	[cagC/tatG]	5.63
		$AA^e\text{-GT}^{aq}$	[gagA/gatT]	5.17	$AA^e\text{-GT}^u$	[gagC/gatG]	4.55	$AA^g\text{-GT}^{aq}$	[gagA/tatT]	5.53
		$AA^g\text{-GT}^u$	[gagC/tatG]	4.14	$AA^i\text{-GT}^{aq}$	[tagA/tatT]	3.93	$AA^i\text{-GT}^u$	[tagC/tatG]	4.27
Summary for CDNN AA-GT: $k_{\min}=3.86$ $k_{\max}=15.2$ $\langle k \rangle=5.1$ $\sigma(k)=2.0$										
AA-TA	$2.64 \pm 0.31$	$AA^{ad}\text{-TA}$	[Aaa/Taa]	2.94	$AA^{ag}\text{-TA}$	[Aag/Tag]	2.64	$AA^{ah}\text{-TA}$	[Aag/Tat]	2.02
		$AA^{al}\text{-TA}$	[Aat/Tat]	2.42	$AA^{at}\text{-TA}$	[Aaa/Tac]	2.91	$AA^f\text{-TA}$	[Aaa/Tag]	2.94
		$AA^k\text{-TA}$	[Tat/Aaa]	3.05	$AA^v\text{-TA}$	[Aac/Tac]	2.63	$AA^x\text{-TA}$	[CaT/GaA]	2.54
		$AA^y\text{-TA}$	[Aac/Tat]	2.34						
Summary for CDNN AA-TA: $k_{\min}=2.02$ $k_{\max}=3.05$ $\langle k \rangle=2.6$ $\sigma(k)=0.31$										
AA-TC	$4.40 \pm 3.1$	$AA^{aq}\text{-TC}^{aq}$	[catA/cacT]	2.82	$AA^{aq}\text{-TC}^u$	[catC/cacG]	2.77	$AA^{as}\text{-TC}^a$	[Cata/Gaca]	3.87
		$AA^{as}\text{-TC}^{aj}$	[Cata/Gacg]	15.7	$AA^{as}\text{-TC}^{an}$	[Catg/Gacg]	3.96	$AA^{as}\text{-TC}^{ao}$	[Catg/Gact]	16.0
		$AA^{as}\text{-TC}^{aq}$	[CatA/GacT]	9.54	$AA^{as}\text{-TC}^{aw}$	[Catt/Gact]	3.75	$AA^{as}\text{-TC}^t$	[Catc/Gacc]	3.74
		$AA^{as}\text{-TC}^u$	[CatC/GacG]	9.52	$AA^{as}\text{-TC}^v$	[Cata/Gacc]	3.09	$AA^{as}\text{-TC}^w$	[Catc/Gact]	3.75
		$AA^{au}\text{-TC}^{aq}$	[catA/tacT]	2.76	$AA^{au}\text{-TC}^u$	[catC/tacG]	3.16	$AA^{az}\text{-TC}^{aq}$	[gatA/gacT]	2.86
		$AA^{az}\text{-TC}^u$	[gatC/gacG]	4.12	$AA^{ba}\text{-TC}^{aq}$	[gatA/tacT]	3.56	$AA^b\text{-TC}^{aq}$	[tatA/tacT]	3.24
		$AA^{ba}\text{-TC}^u$	[gatC/tacG]	3.09	$AA^b\text{-TC}^u$	[tatC/tacG]	2.97	$AA^n\text{-TC}^{aq}$	[aatA/aacT]	3.29
		$AA^n\text{-TC}^u$	[aatC/aacG]	2.92	$AA^r\text{-TC}^{aq}$	[aatA/cacT]	3.44	$AA^r\text{-TC}^u$	[aatC/cacG]	3.42
		$AA^u\text{-TC}^{aq}$	[aatA/gacT]	3.21	$AA^u\text{-TC}^u$	[aatC/gacG]	3.60	$AA^y\text{-TC}^a$	[Aata/Taca]	2.94
		$AA^y\text{-TC}^{aj}$	[Aata/Tacg]	3.03	$AA^y\text{-TC}^{an}$	[Aatg/Tacg]	3.57	$AA^y\text{-TC}^{ao}$	[Aatg/Tact]	3.61
		$AA^y\text{-TC}^{aq}$	[AatA/TacT]	2.71	$AA^y\text{-TC}^{aw}$	[Aatt/Tact]	3.34	$AA^y\text{-TC}^t$	[Aatc/Tacc]	4.04
		$AA^y\text{-TC}^u$	[AatC/TacG]	3.54	$AA^y\text{-TC}^v$	[Aata/Tacc]	3.60	$AA^y\text{-TC}^w$	[Aatc/Tact]	3.72
Summary for CDNN AA-TC: $k_{\min}=2.71$ $k_{\max}=16.0$ $\langle k \rangle=4.4$ $\sigma(k)=3.1$										
AA-TG	$8.57 \pm 4.1$	$AA^{aa}\text{-TG}^{aq}$	[aatA/aagT]	7.95	$AA^{aa}\text{-TG}^u$	[aatC/aagG]	7.98	$AA^{ac}\text{-TG}^{aq}$	[aatA/cagT]	6.44
		$AA^{ac}\text{-TG}^u$	[aatC/cagG]	7.67	$AA^{af}\text{-TG}^{aq}$	[aatA/gagT]	6.65	$AA^{af}\text{-TG}^u$	[aatC/gagG]	7.29
		$AA^{ah}\text{-TG}^a$	[Aata/Taga]	8.40	$AA^{ah}\text{-TG}^{aj}$	[Aata/Tagg]	7.98	$AA^{ah}\text{-TG}^{an}$	[Aatg/Tagg]	6.31
		$AA^{ah}\text{-TG}^{ao}$	[Aatg/Tagt]	15.3	$AA^{ah}\text{-TG}^{aq}$	[AatA/TagT]	6.51	$AA^{ah}\text{-TG}^{aw}$	[Aatt/Tagt]	30.7
		$AA^{ah}\text{-TG}^t$	[Aatc/Tagc]	8.59	$AA^{ah}\text{-TG}^u$	[AatC/TagG]	8.55	$AA^{ah}\text{-TG}^v$	[Aata/Tagc]	8.25
		$AA^{ah}\text{-TG}^w$	[Aatc/Tagt]	13.9	$AA^{aw}\text{-TG}^{aq}$	[catA/cagT]	7.65	$AA^{aw}\text{-TG}^u$	[catC/cagG]	7.59
		$AA^{ay}\text{-TG}^a$	[Cata/Gaga]	8.41	$AA^{ay}\text{-TG}^{aj}$	[Cata/Gagg]	7.58	$AA^{ay}\text{-TG}^{an}$	[Catg/Gagg]	8.38
		$AA^{ay}\text{-TG}^{ao}$	[Catg/Gagt]	7.48	$AA^{ay}\text{-TG}^{aq}$	[CatA/GagT]	6.30	$AA^{ay}\text{-TG}^{aw}$	[Catt/Gagt]	6.74

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$AA^{ay}-TG^t$	[Catc/Gagc]	6.65	$AA^{ay}-TG^u$	[CatC/GagG]	7.72	$AA^{ay}-TG^v$	[Cata/Gagc]	8.18
		$AA^{ay}-TG^w$	[Catc/Gagt]	8.39	$AA^{ba}-TG^{aq}$	[catA/tagT]	8.53	$AA^{ba}-TG^u$	[catC/tagG]	6.58
		$AA^e-TG^{aq}$	[gatA/gagT]	7.20	$AA^e-TG^u$	[gatC/gagG]	6.23	$AA^g-TG^{aq}$	[gatA/tagT]	8.43
		$AA^g-TG^u$	[gatC/tagG]	7.90	$AA^i-TG^{aq}$	[tatA/tagT]	6.38	$AA^i-TG^u$	[tatC/tagG]	7.86
		Summary for CDNN AA-TG: $k_{\min}=6.23$ $k_{\max}=30.7$ $\langle k \rangle=8.6$ $\sigma(k)=4.1$								
AA-TT	$9.75 \pm 1.3$	$AA^{ai}-TT^{ad}$	[aatA/aatT]	10.9	$AA^{ai}-TT^m$	[aatC/aatG]	7.96	$AA^{aj}-TT^{ad}$	[aatA/catT]	9.56
		$AA^{aj}-TT^m$	[aatC/catG]	8.89	$AA^{ak}-TT^{ad}$	[aatA/gatT]	8.31	$AA^{ak}-TT^m$	[aatC/gatG]	8.99
		$AA^{al}-TT^a$	[Aata/Tata]	8.62	$AA^{al}-TT^{aa}$	[Aatg/Tatt]	11.6	$AA^{al}-TT^{ad}$	[AatA/TatT]	12.2
		$AA^{al}-TT^{ai}$	[Aatt/Tatt]	9.31	$AA^{al}-TT^l$	[Aatc/Tatc]	8.09	$AA^{al}-TT^m$	[AatC/TatG]	12.5
		$AA^{al}-TT^n$	[Aatc/Tatt]	8.51	$AA^{al}-TT^o$	[Aata/Tatc]	11.6	$AA^{al}-TT^w$	[Aata/Tatg]	9.96
		$AA^{al}-TT^z$	[Aatg/Tatg]	10.6	$AA^b-TT^{ad}$	[catA/tatT]	10.9	$AA^{bb}-TT^{ad}$	[catA/catT]	9.40
		$AA^{bb}-TT^m$	[catC/catG]	9.69	$AA^{bc}-TT^a$	[Cata/Gata]	11.4	$AA^{bc}-TT^{aa}$	[Catg/Gatt]	7.90
		$AA^{bc}-TT^{ad}$	[CatA/GatT]	11.7	$AA^{bc}-TT^{ai}$	[Catt/Gatt]	8.24	$AA^{bc}-TT^l$	[Catc/Gatc]	11.0
		$AA^{bc}-TT^m$	[CatC/GatG]	11.2	$AA^{bc}-TT^n$	[Catc/Gatt]	8.36	$AA^{bc}-TT^o$	[Cata/Gatc]	10.4
		$AA^{bc}-TT^w$	[Cata/Gatg]	8.93	$AA^{bc}-TT^z$	[Catg/Gatg]	7.84	$AA^b-TT^m$	[catC/tatG]	8.55
		$AA^h-TT^{ad}$	[gatA/gatT]	8.76	$AA^h-TT^m$	[gatC/gatG]	8.78	$AA^i-TT^{ad}$	[gatA/tatT]	9.81
		$AA^i-TT^m$	[gatC/tatG]	9.94	$AA^j-TT^{ad}$	[tatA/tatT]	10.6	$AA^j-TT^m$	[tatC/tatG]	10.0
		Summary for CDNN AA-TT: $k_{\min}=7.84$ $k_{\max}=12.5$ $\langle k \rangle=9.8$ $\sigma(k)=1.3$								
AC-AC	$3.55 \pm 1.8$	$AC^{aa}-AC^{ad}$	[caaC/ccgG]	3.03	$AC^{aa}-AC^{bc}$	[caaA/ccct]	2.80	$AC^{ad}-AC^{aa}$	[Caac/Gccc]	3.89
		$AC^{ad}-AC^{ad}$	[CaaC/GccG]	3.12	$AC^{ad}-AC^{ae}$	[Caac/Gcct]	13.9	$AC^{ad}-AC^{ap}$	[Caag/Gccg]	3.96
		$AC^{ad}-AC^{ar}$	[Caag/Gcct]	2.67	$AC^{ad}-AC^{ax}$	[Caat/Gcct]	3.09	$AC^{ad}-AC^{ay}$	[Caaa/Gccc]	3.75
		$AC^{ad}-AC^{bb}$	[Caaa/Gccg]	2.95	$AC^{ad}-AC^{bc}$	[CaaA/GccT]	3.57	$AC^{ad}-AC^{ca}$	[Caaa/Gcca]	2.74
		$AC^{ae}-AC^{ad}$	[caaC/tccG]	3.28	$AC^{ae}-AC^{bc}$	[caaA/tccT]	3.38	$AC^{ap}-AC^{ad}$	[gaaC/gccG]	3.75
		$AC^{ap}-AC^{bc}$	[gaaA/gccT]	3.90	$AC^{ar}-AC^{ad}$	[gaaC/tccG]	3.16	$AC^{ar}-AC^{bc}$	[gaaA/tccT]	2.92
		$AC^{ax}-AC^{ad}$	[taaC/tccG]	2.82	$AC^{ax}-AC^{bc}$	[taaA/tccT]	3.73	$AC^{ay}-AC^{ad}$	[aaaC/ccgG]	3.14
		$AC^{ay}-AC^{bc}$	[aaaA/ccct]	3.28	$AC^{bb}-AC^{ad}$	[aaaC/gccG]	3.29	$AC^{bb}-AC^{bc}$	[aaaA/gccT]	2.79
		$AC^{bc}-AC^{aa}$	[Aaac/Tccc]	2.74	$AC^{bc}-AC^{ad}$	[Aaac/Tccc]	3.00	$AC^{bc}-AC^{ae}$	[Aaac/Tcct]	2.93
		$AC^{bc}-AC^{ap}$	[Aaag/Tccg]	3.79	$AC^{bc}-AC^{ar}$	[Aaag/Tcct]	2.90	$AC^{bc}-AC^{ax}$	[Aaac/Tcct]	3.20
		$AC^{bc}-AC^{ay}$	[Aaaa/Tccc]	3.65	$AC^{bc}-AC^{bb}$	[Aaaa/Tccg]	3.79	$AC^{bc}-AC^{bc}$	[AaaA/Tcct]	3.19
		$AC^{bc}-AC^v$	[Aaaa/Tcca]	3.44	$AC^v-AC^{ad}$	[aaaC/accG]	2.73	$AC^v-AC^{bc}$	[aaaA/accT]	3.49
		Summary for CDNN AC-AC: $k_{\min}=2.67$ $k_{\max}=13.9$ $\langle k \rangle=3.6$ $\sigma(k)=1.8$								
AC-AG	$9.99 \pm 5.4$	$AC^{ag}-AG^{ad}$	[caaC/cgG]	9.26	$AC^{ag}-AG^{bc}$	[caaA/cgT]	9.33	$AC^{ah}-AG^{aa}$	[Caac/Gcgc]	9.09
		$AC^{ah}-AG^{ad}$	[CaaC/GcgG]	10.6	$AC^{ah}-AG^{ae}$	[Caac/Gcgt]	9.47	$AC^{ah}-AG^{ap}$	[Caag/Gcgg]	6.90
		$AC^{ah}-AG^{ar}$	[Caag/Gcgt]	8.17	$AC^{ah}-AG^{ax}$	[Caat/Gcgt]	6.86	$AC^{ah}-AG^{ay}$	[Caaa/Gcgc]	8.85
		$AC^{ah}-AG^{bb}$	[Caaa/Gcgg]	9.66	$AC^{ah}-AG^{bc}$	[CaaA/GcgT]	7.90	$AC^{ah}-AG^v$	[Caaa/Goga]	7.00
		$AC^{ai}-AG^{ad}$	[caaC/tcgG]	9.56	$AC^{ai}-AG^{bc}$	[caaA/tcgT]	6.83	$AC^{aj}-AG^{ad}$	[aaaC/accG]	9.38
		$AC^{aj}-AG^{bc}$	[aaaA/accT]	34.6	$AC^{as}-AG^{ad}$	[gaaC/gcgG]	7.14	$AC^{as}-AG^{bc}$	[gaaA/gcgT]	7.50
		$AC^{at}-AG^{ad}$	[gaaC/tcgG]	9.59	$AC^{at}-AG^{bc}$	[gaaA/tcgT]	6.79	$AC^{az}-AG^{ad}$	[taaC/tcgG]	9.35
		$AC^{az}-AG^{bc}$	[taaA/tcgT]	7.94	$AC^b-AG^{ad}$	[aaaC/gcgG]	16.5	$AC^{bb}-AG^{ad}$	[aaaC/cgG]	8.54
		$AC^{bb}-AG^{bc}$	[aaaA/ccgT]	23.6	$AC^b-AG^{bc}$	[aaaA/gcgT]	18.6	$AC^c-AG^{aa}$	[Aaac/Tcgc]	6.64
		$AC^c-AG^{ad}$	[AaaC/TcgG]	8.88	$AC^c-AG^{ae}$	[Aaac/Tcgt]	7.84	$AC^c-AG^{ap}$	[Aaag/Tccg]	7.38
		$AC^c-AG^{ar}$	[Aaag/Tcgt]	6.97	$AC^c-AG^{ax}$	[Aaat/Tcgt]	9.05	$AC^c-AG^{ay}$	[Aaaa/Tcgc]	8.91
		$AC^c-AG^{bb}$	[Aaaa/Tcgg]	8.15	$AC^c-AG^{bc}$	[AaaA/TcgT]	7.66	$AC^c-AG^v$	[Aaaa/Toga]	9.22
		Summary for CDNN AC-AG: $k_{\min}=6.64$ $k_{\max}=34.6$ $\langle k \rangle=10.$ $\sigma(k)=5.4$								
AC-AT	$2.91 \pm 0.41$	$AC^{ak}-AT$	[Tcc/Aac]	2.90	$AC^{al}-AT$	[CaA/GcT]	3.29	$AC^{am}-AT$	[Tcc/Aat]	2.64
		$AC^{aq}-AT$	[Tca/Aaa]	3.18	$AC^{au}-AT$	[Tcg/Aag]	3.45	$AC^{av}-AT$	[Tcg/Aat]	2.36
		$AC^{ba}-AT$	[Tct/Aat]	3.46	$AC^{bc}-AT$	[Tca/Aac]	3.01	$AC^c-AT$	[Tca/Aag]	2.53
		$AC^r-AT$	[Aaa/TcT]	2.32						
		Summary for CDNN AC-AT: $k_{\min}=2.32$ $k_{\max}=3.46$ $\langle k \rangle=2.9$ $\sigma(k)=0.41$								
AC-CA	$2.48 \pm 0.29$	$AC^{aa}-CA^{ad}$	[cacC/ccaG]	2.32	$AC^{aa}-CA^{bc}$	[cacA/ccaT]	2.11	$AC^{ad}-CA^{ad}$	[CacC/GcaG]	2.68
		$AC^{ad}-CA^{ae}$	[Cacc/Gcat]	2.93	$AC^{ad}-CA^{ap}$	[Cacg/Gcag]	2.34	$AC^{ad}-CA^{ar}$	[Cacg/Gcat]	2.96
		$AC^{ad}-CA^{ax}$	[Cact/Gcat]	2.17	$AC^{ad}-CA^{ay}$	[Caca/Gcac]	2.53	$AC^{ad}-CA^{bb}$	[Caca/Gcag]	2.78
		$AC^{ad}-CA^{bc}$	[CacA/GcaT]	2.32	$AC^{ad}-CA^v$	[Caca/Gcaa]	2.54	$AC^{ae}-CA^{bc}$	[cacA/tcaT]	2.13

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$AC^{ap}\text{-}CA^{bc}$	[gacA/gcaT]	2.06	$AC^{ar}\text{-}CA^{bc}$	[gacA/tcaT]	2.37	$AC^{ax}\text{-}CA^{bc}$	[tacA/tcaT]	2.15
		$AC^{ay}\text{-}CA^{bc}$	[aacA/ccaT]	2.65	$AC^{bb}\text{-}CA^{bc}$	[aacA/gcaT]	2.80	$AC^{bc}\text{-}CA^{bc}$	[AacA/TcaT]	2.91
		$AC^{bc}\text{-}CA^v$	[Aaca/Tcaa]	2.47						
		Summary for	CDNN AC-CA:	$k_{\min}=2.06$	$k_{\max}=2.96$	$\langle k \rangle=2.5$	$\sigma(k)=0.29$			
AC-CC	$1.43 \pm 0.15$	$AC^{aa}\text{-}CC^{at}$	[aacA/cctT]	1.61	$AC^{aa}\text{-}CC^q$	[aacC/cctG]	1.22	$AC^{aq}\text{-}CC^{at}$	[aacA/gccT]	1.52
		$AC^{ag}\text{-}CC^q$	[aacC/gccG]	1.28	$AC^{ak}\text{-}CC^{ab}$	[Aacg/Tccg]	1.54	$AC^{ak}\text{-}CC^{ac}$	[Aacg/Tcct]	1.58
		$AC^{ak}\text{-}CC^{aj}$	[Aact/Tcct]	1.43	$AC^{ak}\text{-}CC^{am}$	[Aaca/Tccc]	1.58	$AC^{ak}\text{-}CC^{an}$	[Aaca/Tccg]	1.33
		$AC^{ak}\text{-}CC^{at}$	[AacA/TcctT]	1.38	$AC^{ak}\text{-}CC^o$	[Aaca/Tcca]	1.34	$AC^{ak}\text{-}CC^p$	[Aacc/Tccc]	1.43
		$AC^{ak}\text{-}CC^q$	[AacC/TccG]	1.34	$AC^{ak}\text{-}CC^r$	[Aacc/Tcct]	1.46	$AC^d\text{-}CC^{at}$	[cacA/cctT]	1.51
		$AC^d\text{-}CC^q$	[cacC/cctG]	1.57	$AC^e\text{-}CC^{ab}$	[Cacg/Gccg]	1.14	$AC^e\text{-}CC^{ac}$	[Cacg/Gcct]	1.55
		$AC^e\text{-}CC^{aj}$	[Cact/Gcct]	1.61	$AC^e\text{-}CC^{am}$	[Caca/Gccc]	1.54	$AC^e\text{-}CC^{an}$	[Caca/Gccg]	1.42
		$AC^e\text{-}CC^{at}$	[CacA/Gcct]	1.65	$AC^e\text{-}CC^o$	[Caca/Gcca]	1.47	$AC^e\text{-}CC^p$	[Cacc/Gccc]	1.61
		$AC^e\text{-}CC^q$	[CacC/GccG]	1.28	$AC^e\text{-}CC^r$	[Cacc/Gcct]	1.53	$AC^f\text{-}CC^{at}$	[cacA/tcct]	1.21
		$AC^f\text{-}CC^q$	[cacC/tccG]	1.56	$AC^j\text{-}CC^{at}$	[gacA/gccT]	1.57	$AC^j\text{-}CC^q$	[gacC/gccG]	1.34
		$AC^k\text{-}CC^{at}$	[gacA/tcctT]	1.40	$AC^k\text{-}CC^q$	[gacC/tccG]	1.22	$AC^p\text{-}CC^{at}$	[tacA/tcctT]	1.22
		$AC^p\text{-}CC^q$	[tacC/tccG]	1.38	$AC^t\text{-}CC^{at}$	[aacA/accT]	1.64	$AC^t\text{-}CC^q$	[aacC/accG]	1.14
		Summary for	CDNN AC-CC:	$k_{\min}=1.14$	$k_{\max}=1.65$	$\langle k \rangle=1.4$	$\sigma(k)=0.15$			
AC-CG	$0.840 \pm 0.35$	$AC^d\text{-}CG$	[Gca/Cac]	0.825	$AC^h\text{-}CG$	[Gca/Cag]	0.609	$AC^i\text{-}CG$	[Aac/TccG]	1.86
		$AC^e\text{-}CG$	[Gcc/Cac]	0.811	$AC^g\text{-}CG$	[Cac/GccG]	0.812	$AC^h\text{-}CG$	[Gcc/Cat]	0.887
		$AC^l\text{-}CG$	[Gcg/Cag]	0.608	$AC^m\text{-}CG$	[Gcg/Cat]	0.686	$AC^q\text{-}CG$	[Gct/Cat]	0.694
		$AC^u\text{-}CG$	[Gca/Caa]	0.611						
		Summary for	CDNN AC-CG:	$k_{\min}=0.608$	$k_{\max}=1.86$	$\langle k \rangle=0.84$	$\sigma(k)=0.35$			
AC-CT	$1.74 \pm 0.20$	$AC^{ae}\text{-}CT^{ad}$	[aacC/cctG]	1.89	$AC^{ae}\text{-}CT^{bc}$	[aacA/cctT]	2.00	$AC^{at}\text{-}CT^{ad}$	[aacC/gctG]	1.51
		$AC^{ai}\text{-}CT^{bc}$	[aacA/gctT]	1.77	$AC^{am}\text{-}CT^{bc}$	[Aacc/Tctc]	1.47	$AC^{am}\text{-}CT^{bd}$	[Aacc/TctG]	2.19
		$AC^{am}\text{-}CT^{ae}$	[Aacc/Tctt]	1.60	$AC^{am}\text{-}CT^{ap}$	[Aacg/Tctg]	1.92	$AC^{am}\text{-}CT^{ar}$	[Aacg/Tctt]	1.65
		$AC^{am}\text{-}CT^{ax}$	[Aact/Tctt]	1.75	$AC^{am}\text{-}CT^{ay}$	[Aaca/Tctc]	1.67	$AC^{am}\text{-}CT^{bb}$	[Aaca/Tctg]	1.62
		$AC^{am}\text{-}CT^{bc}$	[AacA/TctT]	1.98	$AC^{am}\text{-}CT^v$	[Aaca/Tcta]	1.43	$AC^f\text{-}CT^{ad}$	[cacC/cctG]	1.65
		$AC^f\text{-}CT^{bc}$	[cacA/cctT]	1.80	$AC^h\text{-}CT^{aa}$	[Cacc/Gctc]	1.68	$AC^h\text{-}CT^{ad}$	[Cacc/GctG]	1.82
		$AC^h\text{-}CT^{ae}$	[Cacc/Gctt]	1.69	$AC^h\text{-}CT^{ap}$	[Cacg/Gctg]	1.53	$AC^h\text{-}CT^{ar}$	[Cacc/Gctt]	1.50
		$AC^h\text{-}CT^{ax}$	[Cact/Gctt]	1.53	$AC^h\text{-}CT^{ay}$	[Caca/Gctc]	1.86	$AC^h\text{-}CT^{bb}$	[Caca/Gctg]	1.60
		$AC^h\text{-}CT^{bc}$	[CacA/GctT]	1.97	$AC^h\text{-}CT^v$	[Caca/Gcta]	1.79	$AC^i\text{-}CT^{ad}$	[cacC/tctG]	2.02
		$AC^i\text{-}CT^{bc}$	[cacA/tctT]	1.94	$AC^n\text{-}CT^{ad}$	[gacC/gctG]	1.94	$AC^n\text{-}CT^{bc}$	[gacA/gctT]	1.47
		$AC^o\text{-}CT^{ad}$	[gacC/tctG]	1.74	$AC^o\text{-}CT^{bc}$	[gacA/tctT]	1.80	$AC^s\text{-}CT^{ad}$	[tacC/tctG]	2.10
		$AC^s\text{-}CT^{bc}$	[tacA/tctT]	1.44	$AC^w\text{-}CT^{ad}$	[aacC/actG]	1.87	$AC^w\text{-}CT^{bc}$	[aacA/actT]	1.44
		Summary for	CDNN AC-CT:	$k_{\min}=1.43$	$k_{\max}=2.19$	$\langle k \rangle=1.7$	$\sigma(k)=0.20$			
AC-GA	$4.09 \pm 2.8$	$AC^{ag}\text{-}GA^{ad}$	[cagC/cagG]	3.52	$AC^{ag}\text{-}GA^{bc}$	[cagA/cctT]	3.68	$AC^{ah}\text{-}GA^{aa}$	[Cagc/Gcac]	3.41
		$AC^{ah}\text{-}GA^{ad}$	[CagC/GcaG]	4.13	$AC^{ah}\text{-}GA^{ae}$	[Cagc/Gcat]	3.27	$AC^{ah}\text{-}GA^{ap}$	[Cagg/Gcag]	2.93
		$AC^{ah}\text{-}GA^{ar}$	[Cagg/Gcat]	2.86	$AC^{ah}\text{-}GA^{ax}$	[Cagt/Gcat]	19.5	$AC^{ah}\text{-}GA^{ay}$	[Caga/Gcac]	3.96
		$AC^{ah}\text{-}GA^{bb}$	[Caga/Gcag]	3.91	$AC^{ah}\text{-}GA^{bc}$	[CagA/GcaT]	9.73	$AC^{ah}\text{-}GA^v$	[Caga/Gcaa]	2.93
		$AC^{ai}\text{-}GA^{ad}$	[cagC/tcaG]	3.25	$AC^{ai}\text{-}GA^{bc}$	[cagA/tcaT]	3.62	$AC^{aj}\text{-}GA^{ad}$	[aagC/acaG]	3.69
		$AC^{aj}\text{-}GA^{bc}$	[aagA/acaT]	3.21	$AC^{as}\text{-}GA^{ad}$	[gagC/gcaG]	3.76	$AC^{as}\text{-}GA^{bc}$	[gagA/gcaT]	3.90
		$AC^{at}\text{-}GA^{ad}$	[gagC/tcaG]	2.97	$AC^{at}\text{-}GA^{bc}$	[gagA/tcaT]	3.35	$AC^{az}\text{-}GA^{ad}$	[tagC/tcaG]	2.93
		$AC^{az}\text{-}GA^{bc}$	[tagA/tcaT]	3.15	$AC^b\text{-}GA^{ad}$	[aagC/gcaG]	3.53	$AC^{bb}\text{-}GA^{ad}$	[aagC/cagG]	3.98
		$AC^{bb}\text{-}GA^{bc}$	[aagA/cctT]	3.83	$AC^b\text{-}GA^{bc}$	[aagA/gcaT]	3.91	$AC^c\text{-}GA^{aa}$	[Aagc/Tcac]	3.16
		$AC^c\text{-}GA^{ad}$	[AagC/TcaG]	3.50	$AC^c\text{-}GA^{ae}$	[Aagc/Tcat]	2.69	$AC^c\text{-}GA^{ap}$	[Aagg/Tcag]	3.20
		$AC^c\text{-}GA^{ar}$	[Aagg/Tcat]	3.67	$AC^c\text{-}GA^{ax}$	[Aagt/Tcat]	2.74	$AC^c\text{-}GA^{ay}$	[Aaga/Tcac]	3.64
		$AC^c\text{-}GA^{bb}$	[Aaga/Tcag]	3.86	$AC^c\text{-}GA^{bc}$	[AagA/TcaT]	3.99	$AC^c\text{-}GA^v$	[Aaga/Tcaa]	3.77
		Summary for	CDNN AC-GA:	$k_{\min}=2.69$	$k_{\max}=19.5$	$\langle k \rangle=4.1$	$\sigma(k)=2.8$			
AC-GC	$2.70 \pm 0.63$	$AC^{ad}\text{-}GC$	[Cca/Gac]	2.74	$AC^{ah}\text{-}GC$	[Cca/Gag]	3.08	$AC^{al}\text{-}GC$	[AaG/TcC]	1.20
		$AC^e\text{-}GC$	[Ccc/Gac]	3.21	$AC^g\text{-}GC$	[CaG/GcC]	1.99	$AC^h\text{-}GC$	[Ccc/Gat]	2.75
		$AC^l\text{-}GC$	[Ccg/Gag]	3.57	$AC^m\text{-}GC$	[Ccg/Gat]	2.90	$AC^q\text{-}GC$	[Cct/Gat]	2.91
		$AC^u\text{-}GC$	[Cca/Gaa]	2.62						
		Summary for	CDNN AC-GC:	$k_{\min}=1.20$	$k_{\max}=3.57$	$\langle k \rangle=2.7$	$\sigma(k)=0.63$			

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$		
AC-GG	$8.79 \pm 6.0$	$AC^{ab}\text{-GG}^{at}$	[tagA/tcgT]	7.68	$AC^{ab}\text{-GG}^q$	[tagC/tcgG]	7.71	$AC^{an}\text{-GG}^{at}$	[aagA/acgT]	39.1		
		$AC^{an}\text{-GG}^q$	[aagC/acgG]	7.99	$AC^{ap}\text{-GG}^{at}$	[aagA/ccgT]	23.0	$AC^{ap}\text{-GG}^q$	[aagC/ccgG]	7.72		
		$AC^{as}\text{-GG}^{at}$	[aagA/gcgT]	15.0	$AC^{as}\text{-GG}^q$	[aagC/gcgG]	7.19	$AC^{au}\text{-GG}^{ab}$	[Aagg/Tcgg]	5.61		
		$AC^{au}\text{-GG}^{ac}$	[Aagg/Tcgt]	7.93	$AC^{au}\text{-GG}^{aj}$	[Aagt/Tcgt]	5.93	$AC^{au}\text{-GG}^{am}$	[Aaga/Tcgc]	7.31		
		$AC^{au}\text{-GG}^{an}$	[Aaga/Tcgg]	5.41	$AC^{au}\text{-GG}^{at}$	[AAGa/TcgT]	7.94	$AC^{au}\text{-GG}^o$	[Aaga/Toga]	7.96		
		$AC^{au}\text{-GG}^p$	[Aagc/Tcgc]	6.10	$AC^{au}\text{-GG}^q$	[AagC/TcgG]	6.28	$AC^{au}\text{-GG}^r$	[Aagc/Tcgt]	7.41		
		$AC^j\text{-GG}^{at}$	[cagA/ccgT]	5.65	$AC^j\text{-GG}^q$	[cagC/ccgG]	7.45	$AC^l\text{-GG}^{ab}$	[Cagg/Gcgg]	7.97		
		$AC^l\text{-GG}^{ac}$	[Cagg/Gcgt]	6.17	$AC^l\text{-GG}^{aj}$	[Cagt/Gcgt]	6.48	$AC^l\text{-GG}^{am}$	[Caga/Gcgc]	6.47		
		$AC^l\text{-GG}^{an}$	[Caga/Gcgg]	12.4	$AC^l\text{-GG}^{at}$	[CAGa/GcgT]	11.2	$AC^l\text{-GG}^o$	[Caga/Gcga]	7.26		
		$AC^l\text{-GG}^p$	[Cagc/Gcgc]	7.06	$AC^l\text{-GG}^q$	[CagC/GcgG]	7.63	$AC^l\text{-GG}^r$	[Cagc/Gcgt]	6.01		
		$AC^n\text{-GG}^{at}$	[cagA/tcgT]	6.72	$AC^n\text{-GG}^q$	[cagC/tcgG]	6.43	$AC^x\text{-GG}^{at}$	[gagA/gcgT]	6.07		
		$AC^x\text{-GG}^q$	[gagC/gcgG]	7.72	$AC^y\text{-GG}^{at}$	[gagA/tcgT]	7.02	$AC^y\text{-GG}^q$	[gagC/tcgG]	7.52		
		Summary for CDNN AC-GG: $k_{\min}=5.41$ $k_{\max}=39.1$ $\langle k \rangle=8.8$ $\sigma(k)=6.0$										
		AC-GT	$9.80 \pm 4.1$	$AC^{ac}\text{-GT}^{ad}$	[tagC/tctG]	7.94	$AC^{ac}\text{-GT}^{bc}$	[tagA/tctT]	7.48	$AC^{ao}\text{-GT}^{ad}$	[aagC/actG]	6.78
$AC^{ao}\text{-GT}^{bc}$	[aagA/actT]			17.6	$AC^{ar}\text{-GT}^{ad}$	[aagC/cctG]	8.06	$AC^{ar}\text{-GT}^{bc}$	[aagA/cctT]	8.59		
$AC^{at}\text{-GT}^{ad}$	[aagC/gctG]			7.22	$AC^{at}\text{-GT}^{bc}$	[aagA/gctT]	6.97	$AC^{av}\text{-GT}^{aa}$	[Aagc/Tctc]	7.76		
$AC^{av}\text{-GT}^{ad}$	[AagC/TctG]			8.21	$AC^{av}\text{-GT}^{ae}$	[Aagc/Tcct]	9.96	$AC^{av}\text{-GT}^{ap}$	[Aagg/Tctg]	6.99		
$AC^{av}\text{-GT}^{ar}$	[Aagg/Tcct]			7.45	$AC^{av}\text{-GT}^{ax}$	[Aagt/Tcct]	9.13	$AC^{av}\text{-GT}^{ay}$	[Aaga/Tctc]	13.4		
$AC^{av}\text{-GT}^{bb}$	[Aaga/Tctg]			19.9	$AC^{av}\text{-GT}^{bc}$	[AAGa/TctT]	8.78	$AC^{av}\text{-GT}^v$	[Aaga/Tcta]	9.22		
$AC^k\text{-GT}^{ad}$	[cagC/cctG]			9.99	$AC^k\text{-GT}^{bc}$	[CAGa/cctT]	8.89	$AC^m\text{-GT}^{aa}$	[Cagc/Gctc]	8.38		
$AC^m\text{-GT}^{ad}$	[CagC/GctG]			6.96	$AC^m\text{-GT}^{ae}$	[Cagc/Gcct]	7.07	$AC^m\text{-GT}^{ap}$	[Cagg/Gctg]	6.88		
$AC^m\text{-GT}^{ar}$	[Cagg/Gcct]			14.1	$AC^m\text{-GT}^{ax}$	[Cagt/Gcct]	8.72	$AC^m\text{-GT}^{ay}$	[Caga/Gctc]	7.29		
$AC^m\text{-GT}^{bb}$	[Caga/Gctg]			27.0	$AC^m\text{-GT}^{bc}$	[CAGa/GctT]	12.7	$AC^m\text{-GT}^v$	[Caga/Gcta]	9.12		
$AC^o\text{-GT}^{ad}$	[cagC/tctG]			8.82	$AC^o\text{-GT}^{bc}$	[cagA/tctT]	9.66	$AC^y\text{-GT}^{ad}$	[gagC/gctG]	8.34		
$AC^y\text{-GT}^{bc}$	[gagA/gctT]			8.09	$AC^z\text{-GT}^{ad}$	[gagC/tctG]	7.01	$AC^z\text{-GT}^{bc}$	[gagA/tctT]	12.2		
Summary for CDNN AC-GT: $k_{\min}=6.78$ $k_{\max}=27.0$ $\langle k \rangle=9.8$ $\sigma(k)=4.1$												
AC-TA	$0.746 \pm 0.32$			$AC^{ak}\text{-TA}$	[Acc/Tac]	0.567	$AC^{al}\text{-TA}$	[CaT/GcA]	1.52	$AC^{am}\text{-TA}$	[Acc/Tat]	0.645
		$AC^{aq}\text{-TA}$	[Aca/Taa]	0.493	$AC^{au}\text{-TA}$	[Acc/Tag]	0.656	$AC^{av}\text{-TA}$	[Acc/Tat]	0.613		
		$AC^{ba}\text{-TA}$	[Act/Tat]	0.585	$AC^{bc}\text{-TA}$	[Aca/Tac]	0.622	$AC^c\text{-TA}$	[Aca/Tag]	0.563		
		$AC^r\text{-TA}$	[AaT/TcA]	1.20								
Summary for CDNN AC-TA: $k_{\min}=0.493$ $k_{\max}=1.52$ $\langle k \rangle=0.75$ $\sigma(k)=0.32$												
AC-TC	$3.49 \pm 1.1$	$AC^{ae}\text{-TC}^{ad}$	[aatC/ccgG]	3.93	$AC^{ae}\text{-TC}^{bc}$	[aatA/ccgT]	3.86	$AC^{ai}\text{-TC}^{ad}$	[aatC/gccG]	3.17		
		$AC^{ai}\text{-TC}^{bc}$	[aatA/gccT]	3.18	$AC^{am}\text{-TC}^{aa}$	[Aatc/Tccc]	2.78	$AC^{am}\text{-TC}^{ad}$	[AatC/TccG]	3.11		
		$AC^{am}\text{-TC}^{ae}$	[Aatc/Tcct]	3.25	$AC^{am}\text{-TC}^{ap}$	[Aatg/Tccg]	3.74	$AC^{am}\text{-TC}^{ar}$	[Aatg/Tcct]	3.84		
		$AC^{am}\text{-TC}^{ax}$	[Aatt/Tcct]	3.02	$AC^{am}\text{-TC}^{ay}$	[Aata/Tccc]	2.78	$AC^{am}\text{-TC}^{bb}$	[Aata/Tccg]	3.23		
		$AC^{am}\text{-TC}^{bc}$	[AatA/Tcct]	3.53	$AC^{am}\text{-TC}^v$	[Aata/Tcca]	3.45	$AC^f\text{-TC}^{ad}$	[catC/ccgG]	3.18		
		$AC^f\text{-TC}^{bc}$	[catA/ccgT]	3.23	$AC^h\text{-TC}^{aa}$	[Catc/Gccc]	3.15	$AC^h\text{-TC}^{ad}$	[CatC/GccG]	3.11		
		$AC^h\text{-TC}^{ae}$	[Catc/Gcct]	3.41	$AC^h\text{-TC}^{ap}$	[Catg/Gccg]	2.96	$AC^h\text{-TC}^{ar}$	[Catg/Gcct]	3.66		
		$AC^h\text{-TC}^{ax}$	[Catt/Gcct]	3.03	$AC^h\text{-TC}^{ay}$	[Cata/Gccc]	2.74	$AC^h\text{-TC}^{bb}$	[Cata/Gccg]	9.95		
		$AC^h\text{-TC}^{bc}$	[CatA/Gcct]	3.39	$AC^h\text{-TC}^v$	[Cata/Gcca]	2.90	$AC^i\text{-TC}^{ad}$	[catC/tccG]	3.75		
		$AC^i\text{-TC}^{bc}$	[catA/tccT]	2.81	$AC^n\text{-TC}^{ad}$	[gatC/gccG]	3.50	$AC^n\text{-TC}^{bc}$	[gatA/gccT]	3.05		
		$AC^o\text{-TC}^{ad}$	[gatC/tccG]	3.49	$AC^o\text{-TC}^{bc}$	[gatA/tccT]	3.76	$AC^s\text{-TC}^{ad}$	[tatC/tccG]	3.70		
		$AC^s\text{-TC}^{bc}$	[tatA/tccT]	3.58	$AC^w\text{-TC}^{ad}$	[aatC/accG]	2.98	$AC^w\text{-TC}^{bc}$	[aatA/accT]	3.47		
		Summary for CDNN AC-TC: $k_{\min}=2.74$ $k_{\max}=9.95$ $\langle k \rangle=3.5$ $\sigma(k)=1.1$										
		AC-TG	$5.53 \pm 6.6$	$AC^{ac}\text{-TG}^{ad}$	[tatC/tcgG]	3.42	$AC^{ac}\text{-TG}^{bc}$	[tatA/tcgT]	4.05	$AC^{ao}\text{-TG}^{ad}$	[aatC/acgG]	3.11
$AC^{ao}\text{-TG}^{bc}$	[aatA/acgT]			37.6	$AC^{ar}\text{-TG}^{ad}$	[aatC/ccgG]	4.43	$AC^{ar}\text{-TG}^{bc}$	[aatA/ccgT]	26.3		
$AC^{at}\text{-TG}^{ad}$	[aatC/gcgG]			3.88	$AC^{at}\text{-TG}^{bc}$	[aatA/gcgT]	8.63	$AC^{av}\text{-TG}^{aa}$	[Aatc/Tcgc]	3.31		
$AC^{av}\text{-TG}^{ad}$	[AatC/TcgG]			4.47	$AC^{av}\text{-TG}^{ae}$	[Aatc/Tcgt]	4.25	$AC^{av}\text{-TG}^{ap}$	[Aatg/Tcgg]	4.24		
$AC^{av}\text{-TG}^{ar}$	[Aatg/Tcgt]			4.53	$AC^{av}\text{-TG}^{ax}$	[Aatt/Tcgt]	4.20	$AC^{av}\text{-TG}^{ay}$	[Aata/Tcgc]	3.70		
$AC^{av}\text{-TG}^{bb}$	[Aata/Tcgg]			3.16	$AC^{av}\text{-TG}^{bc}$	[AatA/TcgT]	4.25	$AC^{av}\text{-TG}^v$	[Aata/Tcga]	3.95		
$AC^k\text{-TG}^{ad}$	[catC/ccgG]			3.42	$AC^k\text{-TG}^{bc}$	[catA/ccgT]	3.92	$AC^m\text{-TG}^{aa}$	[Catc/Gcgc]	4.20		
$AC^m\text{-TG}^{ad}$	[CatC/GcgG]			3.54	$AC^m\text{-TG}^{ae}$	[Catc/Gcgt]	3.70	$AC^m\text{-TG}^{ap}$	[Catg/Gcgg]	3.19		
$AC^m\text{-TG}^{ar}$	[Catg/Gcgt]			4.51	$AC^m\text{-TG}^{ax}$	[Catt/Gcgt]	3.66	$AC^m\text{-TG}^{ay}$	[Cata/Gcgc]	3.26		

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$AC^m-TG^{bb}$	[Cata/Gcgg]	4.40	$AC^m-TG^{bc}$	[CatA/GcgT]	3.44	$AC^m-TG^v$	[Cata/Gcga]	3.63
		$AC^o-TG^{ad}$	[catC/tcgG]	4.50	$AC^o-TG^{bc}$	[cata/tcgT]	3.92	$AC^y-TG^{ad}$	[gatC/gcgG]	3.35
		$AC^y-TG^{bc}$	[gatA/gcgT]	3.21	$AC^z-TG^{ad}$	[gatC/tcgG]	3.33	$AC^z-TG^{bc}$	[gatA/tcgT]	4.23
		Summary for CDNN AC-TG: $k_{\min}=3.11$ $k_{\max}=37.6$ $\langle k \rangle=5.5$ $\sigma(k)=6.6$								
AC-TT	$5.92 \pm 2.7$	$AC^{ab}-TT^{at}$	[gata/gctT]	10.6	$AC^{ab}-TT^q$	[gatC/gctG]	5.66	$AC^{ac}-TT^{at}$	[gata/tctT]	4.82
		$AC^{ac}-TT^q$	[gatC/tctG]	4.98	$AC^{af}-TT^{at}$	[tatA/tctT]	4.61	$AC^{af}-TT^q$	[tatC/tctG]	6.37
		$AC^{aw}-TT^{at}$	[aatA/actT]	18.6	$AC^{aw}-TT^q$	[aatC/actG]	5.22	$AC^{ax}-TT^{at}$	[aatA/cctT]	12.3
		$AC^{ax}-TT^q$	[aatC/cctG]	4.24	$AC^{az}-TT^{at}$	[aatA/gctT]	4.29	$AC^{az}-TT^q$	[aatC/gctG]	6.04
		$AC^{ba}-TT^{ab}$	[Aatg/Tctg]	6.20	$AC^{ba}-TT^{ac}$	[Aatg/Tctt]	4.79	$AC^{ba}-TT^{aj}$	[Aatt/Tctt]	4.36
		$AC^{ba}-TT^{am}$	[Aata/Tctc]	5.45	$AC^{ba}-TT^{an}$	[Aata/Tctg]	4.57	$AC^{ba}-TT^{at}$	[Aata/TctT]	5.27
		$AC^{ba}-TT^o$	[Aata/Tcta]	4.86	$AC^{ba}-TT^p$	[Aatc/Tctc]	4.91	$AC^{ba}-TT^q$	[AatC/TctG]	5.03
		$AC^{ba}-TT^r$	[Aatc/Tctt]	5.01	$AC^p-TT^{at}$	[catA/cctT]	5.87	$AC^p-TT^q$	[catC/cctG]	4.37
		$AC^q-TT^{ab}$	[Catg/Gctg]	4.84	$AC^q-TT^{ac}$	[Catg/Gctt]	4.56	$AC^q-TT^{aj}$	[Catt/Gctt]	6.31
		$AC^q-TT^{am}$	[Cata/Gctc]	5.25	$AC^q-TT^{an}$	[Cata/Gctg]	4.29	$AC^q-TT^{at}$	[CatA/GctT]	4.73
		$AC^q-TT^o$	[Cata/Gcta]	5.93	$AC^q-TT^p$	[Catc/Gctc]	4.88	$AC^q-TT^q$	[CatC/GctG]	6.11
		$AC^q-TT^r$	[Catc/Gctt]	6.39	$AC^s-TT^{at}$	[catA/tctT]	6.26	$AC^s-TT^q$	[catC/tctG]	5.08
		Summary for CDNN AC-TT: $k_{\min}=4.24$ $k_{\max}=18.6$ $\langle k \rangle=5.9$ $\sigma(k)=2.7$								
AG-AC	$2.30 \pm 2.0$	$AG^{aa}-AC^{ah}$	[caaC/cgcG]	1.64	$AG^{aa}-AC^c$	[caaA/cgcT]	1.98	$AG^{ad}-AC^{ag}$	[Caac/Ggcc]	2.07
		$AG^{ad}-AC^{ah}$	[CaaC/GgcG]	1.54	$AG^{ad}-AC^{ai}$	[Caac/Ggct]	12.0	$AG^{ad}-AC^{aj}$	[Caaa/Ggca]	1.68
		$AG^{ad}-AC^{as}$	[Caag/Ggcg]	1.92	$AG^{ad}-AC^{at}$	[Caag/Ggct]	7.25	$AG^{ad}-AC^{az}$	[Caat/Ggct]	1.77
		$AG^{ad}-AC^b$	[Caaa/Ggcg]	1.60	$AG^{ad}-AC^{bb}$	[Caaa/Ggcc]	1.47	$AG^{ad}-AC^c$	[CaaA/GgcT]	6.10
		$AG^{ae}-AC^{ah}$	[caaC/tgcG]	1.52	$AG^{ae}-AC^c$	[caaA/tgcT]	1.55	$AG^{ap}-AC^{ah}$	[gaaC/ggcG]	1.86
		$AG^{ap}-AC^c$	[gaaA/ggcT]	2.02	$AG^{ar}-AC^{ah}$	[gaaC/tgcG]	1.73	$AG^{ar}-AC^c$	[gaaA/tgcT]	1.41
		$AG^{ax}-AC^{ah}$	[taaC/tgcG]	1.89	$AG^{ax}-AC^c$	[taaA/tgcT]	1.92	$AG^{ay}-AC^{ah}$	[aaaC/cgcG]	1.98
		$AG^{ay}-AC^c$	[aaaA/cgcT]	1.51	$AG^{bb}-AC^{ah}$	[aaaC/ggcG]	2.05	$AG^{bb}-AC^c$	[aaaA/ggcT]	1.43
		$AG^{bc}-AC^{ag}$	[Aaac/Tgcc]	1.93	$AG^{bc}-AC^{ah}$	[AaaC/TgcG]	1.46	$AG^{bc}-AC^{ai}$	[Aaac/Tgct]	2.07
		$AG^{bc}-AC^{aj}$	[Aaaa/Tgca]	1.76	$AG^{bc}-AC^{as}$	[AaaG/Tgcg]	1.71	$AG^{bc}-AC^{at}$	[AaaG/Tgct]	1.83
		$AG^{bc}-AC^{az}$	[Aaat/Tgct]	1.44	$AG^{bc}-AC^b$	[Aaaa/Tgcg]	1.90	$AG^{bc}-AC^{bb}$	[Aaaa/Tgcc]	1.63
		$AG^{bc}-AC^c$	[AaaA/TgcT]	1.88	$AG^v-AC^{ah}$	[aaaC/aggG]	1.59	$AG^v-AC^c$	[aaaA/aggT]	1.80
		Summary for CDNN AG-AC: $k_{\min}=1.41$ $k_{\max}=12.0$ $\langle k \rangle=2.3$ $\sigma(k)=2.0$								
AG-AG	$5.43 \pm 1.5$	$AG^{ag}-AG^{ah}$	[caaC/cggG]	5.15	$AG^{ag}-AG^c$	[caaA/cggT]	4.15	$AG^{ah}-AG^{ag}$	[Caac/Gggc]	4.66
		$AG^{ah}-AG^{ah}$	[CaaC/GggG]	4.31	$AG^{ah}-AG^{ai}$	[Caac/Gggt]	5.55	$AG^{ah}-AG^{aj}$	[Caaa/Ggga]	4.35
		$AG^{ah}-AG^{as}$	[Caag/Gggg]	5.10	$AG^{ah}-AG^{at}$	[Caag/Gggt]	4.86	$AG^{ah}-AG^{az}$	[Caat/Gggt]	4.35
		$AG^{ah}-AG^b$	[Caaa/Gggg]	4.22	$AG^{ah}-AG^{bb}$	[Caaa/Gggc]	5.36	$AG^{ah}-AG^c$	[CaaA/GggT]	5.89
		$AG^{ai}-AG^{ah}$	[caaC/tggG]	4.93	$AG^{ai}-AG^c$	[caaA/tggT]	4.05	$AG^{aj}-AG^{ah}$	[aaaC/aggG]	5.01
		$AG^{aj}-AG^c$	[aaaA/aggT]	4.53	$AG^{as}-AG^{ah}$	[gaaC/gggG]	4.01	$AG^{as}-AG^c$	[gaaA/gggT]	4.44
		$AG^{at}-AG^{ah}$	[gaaC/tggG]	4.35	$AG^{at}-AG^c$	[gaaA/tggT]	5.60	$AG^{az}-AG^{ah}$	[taaC/tggG]	4.83
		$AG^{az}-AG^c$	[taaA/tggT]	5.48	$AG^b-AG^{ah}$	[aaaC/gggG]	5.17	$AG^{bb}-AG^{ah}$	[aaaC/cggG]	8.37
		$AG^{bb}-AG^c$	[aaaA/cggT]	9.49	$AG^b-AG^c$	[aaaA/gggT]	4.95	$AG^c-AG^{ag}$	[Aaac/Tggc]	4.64
		$AG^c-AG^{ah}$	[AaaC/TggG]	6.02	$AG^c-AG^{ai}$	[Aaac/Tggt]	10.2	$AG^c-AG^{aj}$	[Aaaa/Tgga]	5.78
		$AG^c-AG^{as}$	[AaaG/Tggg]	5.47	$AG^c-AG^{at}$	[AaaG/Tggt]	9.03	$AG^c-AG^{az}$	[Aaat/Tggt]	4.63
		$AG^c-AG^b$	[Aaaa/Tggg]	5.86	$AG^c-AG^{bb}$	[Aaaa/Tggc]	5.57	$AG^c-AG^c$	[AaaA/TggT]	5.18
		Summary for CDNN AG-AG: $k_{\min}=4.01$ $k_{\max}=10.2$ $\langle k \rangle=5.4$ $\sigma(k)=1.5$								
AG-AT	$7.34 \pm 2.2$	$AG^{ak}-AT$	[Tgc/Aac]	6.27	$AG^{al}-AT$	[Caa/GgT]	6.09	$AG^{am}-AT$	[Tgc/Aat]	6.38
		$AG^{aq}-AT$	[Tga/Aaa]	6.87	$AG^{au}-AT$	[Tgg/Aag]	11.7	$AG^{av}-AT$	[Tgg/Aat]	11.1
		$AG^{ba}-AT$	[Tgt/Aat]	8.38	$AG^{bc}-AT$	[Tga/Aac]	5.36	$AG^c-AT$	[Tga/Aag]	5.42
		$AG^r-AT$	[Aaa/TgT]	5.76						
		Summary for CDNN AG-AT: $k_{\min}=5.36$ $k_{\max}=11.7$ $\langle k \rangle=7.3$ $\sigma(k)=2.2$								
AG-CC	$1.67 \pm 0.56$	$AG^{aa}-CC^f$	[aacA/cgcT]	1.73	$AG^{aa}-CC^t$	[aacC/cgcG]	1.38	$AG^{ag}-CC^f$	[aacA/ggcT]	1.78
		$AG^{ag}-CC^t$	[aacC/ggcG]	1.84	$AG^{ak}-CC^{ae}$	[Aacc/Tgcg]	1.26	$AG^{ak}-CC^{af}$	[Aacc/Tgct]	1.81
		$AG^{ak}-CC^{ak}$	[Aact/Tgct]	1.77	$AG^{ak}-CC^{an}$	[Aaca/Tgcc]	1.34	$AG^{ak}-CC^c$	[Aaca/Tgcg]	1.69
		$AG^{ak}-CC^f$	[AacA/TgcT]	1.40	$AG^{ak}-CC^s$	[Aacc/Tgcc]	1.77	$AG^{ak}-CC^t$	[AacC/TgcG]	1.81
		$AG^{ak}-CC^u$	[Aacc/Tgct]	1.59	$AG^{ak}-CC^w$	[Aaca/Tgca]	1.30	$AG^d-CC^f$	[cacA/cgcT]	1.89

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$AG^d-CC^t$	[cacC/cgcG]	1.36	$AG^e-CC^{ae}$	[Cacg/Ggcg]	1.58	$AG^e-CC^{af}$	[Cacg/Ggct]	1.92
		$AG^e-CC^{ak}$	[Cact/Ggct]	1.85	$AG^e-CC^{an}$	[Caca/Ggcc]	1.61	$AG^e-CC^c$	[Caca/Ggcg]	1.60
		$AG^e-CC^f$	[CacA/Ggct]	4.77	$AG^e-CC^s$	[Cacc/Ggcc]	1.29	$AG^e-CC^t$	[CacC/Ggct]	1.64
		$AG^e-CC^u$	[Cacc/Ggct]	1.35	$AG^e-CC^w$	[Caca/Ggca]	1.53	$AG^f-CC^f$	[cacA/tgct]	1.48
		$AG^f-CC^t$	[cacC/tgct]	1.37	$AG^j-CC^f$	[gacA/ggct]	1.29	$AG^j-CC^t$	[gacC/ggct]	1.65
		$AG^k-CC^f$	[gacA/tgct]	1.80	$AG^k-CC^t$	[gacC/tgct]	1.79	$AG^p-CC^f$	[tacA/tgct]	1.40
		$AG^p-CC^t$	[tacC/tgct]	1.33	$AG^t-CC^f$	[aacA/agct]	1.32	$AG^t-CC^t$	[aacC/agct]	1.79
		Summary for CDNN AG-CC: $k_{\min}=1.26$ $k_{\max}=4.77$ $\langle k \rangle=1.7$ $\sigma(k)=0.56$								
AG-CG	$3.64 \pm 0.88$	$AG^{ad}-CG$	[Gga/Cac]	3.65	$AG^{ah}-CG$	[Gga/Cag]	4.31	$AG^{al}-CG$	[Aac/TgG]	5.45
		$AG^e-CG$	[Ggc/Cac]	3.49	$AG^g-CG$	[CaC/GgG]	4.00	$AG^h-CG$	[Ggc/Cat]	3.07
		$AG^l-CG$	[Ggg/Cag]	3.69	$AG^m-CG$	[Ggg/Cat]	3.58	$AG^q-CG$	[Ggt/Cat]	1.79
		$AG^u-CG$	[Gga/Caa]	3.38						
		Summary for CDNN AG-CG: $k_{\min}=1.79$ $k_{\max}=5.45$ $\langle k \rangle=3.6$ $\sigma(k)=0.88$								
AG-CT	$5.14 \pm 2.2$	$AG^{ae}-CT^{ah}$	[aacC/cgtG]	9.51	$AG^{ae}-CT^c$	[aacA/cgtT]	4.63	$AG^{ai}-CT^{ah}$	[aacC/ggtG]	3.29
		$AG^{ai}-CT^c$	[aacA/ggtT]	4.11	$AG^{am}-CT^{ag}$	[Aacc/Tgtc]	3.46	$AG^{am}-CT^{ah}$	[Aacc/TgtG]	9.78
		$AG^{am}-CT^{ai}$	[Aacc/Tggt]	4.04	$AG^{am}-CT^{aj}$	[Aaca/Tgta]	4.53	$AG^{am}-CT^{as}$	[Aacc/Tgtg]	4.36
		$AG^{am}-CT^{at}$	[Aacg/Tggt]	4.14	$AG^{am}-CT^{az}$	[Aact/Tgtt]	4.26	$AG^{am}-CT^b$	[Aaca/Tgtg]	4.73
		$AG^{am}-CT^{bb}$	[Aaca/Tgtc]	3.57	$AG^{am}-CT^c$	[AacA/TgtT]	4.83	$AG^f-CT^{ah}$	[cacC/cgtG]	6.99
		$AG^f-CT^c$	[cacA/cgtT]	4.07	$AG^h-CT^{ag}$	[Cacc/Ggtc]	4.62	$AG^h-CT^{ah}$	[Cacc/GgtG]	9.09
		$AG^h-CT^{ai}$	[Cacc/Ggtt]	4.39	$AG^h-CT^{aj}$	[Caca/Ggta]	3.40	$AG^h-CT^{as}$	[Cacc/Ggtg]	4.34
		$AG^h-CT^{at}$	[Cacg/Ggtt]	4.47	$AG^h-CT^{az}$	[Cact/Ggtt]	3.34	$AG^h-CT^b$	[cacC/tgct]	3.49
		$AG^h-CT^{bb}$	[Caca/Ggtc]	4.46	$AG^h-CT^c$	[CacA/GgtT]	9.23	$AG^i-CT^{ah}$	[cacC/tgtG]	7.19
		$AG^i-CT^c$	[cacA/tgtT]	9.98	$AG^n-CT^{ah}$	[gacC/ggtG]	4.56	$AG^n-CT^c$	[gacA/ggtT]	3.66
		$AG^o-CT^{ah}$	[gacC/tgtG]	3.28	$AG^o-CT^c$	[gacA/tgtT]	10.0	$AG^s-CT^{ah}$	[tacC/tgtG]	3.59
		$AG^s-CT^c$	[tacA/tgtT]	4.39	$AG^w-CT^{ah}$	[aacC/agtG]	3.65	$AG^w-CT^c$	[aacA/agtT]	3.56
		Summary for CDNN AG-CT: $k_{\min}=3.28$ $k_{\max}=10.0$ $\langle k \rangle=5.1$ $\sigma(k)=2.2$								
AG-GA	$3.62 \pm 2.1$	$AG^{ag}-GA^{ah}$	[cagC/cgaG]	2.65	$AG^{ag}-GA^c$	[cagA/cgaT]	2.52	$AG^{ah}-GA^{ah}$	[CagC/GgaG]	8.95
		$AG^{ah}-GA^{ai}$	[Cagc/Ggat]	2.65	$AG^{ah}-GA^{aj}$	[Caga/Ggaa]	2.46	$AG^{ah}-GA^{as}$	[Cagg/Ggag]	2.72
		$AG^{ah}-GA^{at}$	[Cagg/Ggat]	5.35	$AG^{ah}-GA^{az}$	[Cagt/Ggat]	3.03	$AG^{ah}-GA^b$	[Caga/Ggag]	2.49
		$AG^{ah}-GA^{bb}$	[Caga/Ggac]	3.45	$AG^{ah}-GA^c$	[CagA/GgaT]	9.67	$AG^{ai}-GA^c$	[cagA/tgaT]	3.19
		$AG^{aj}-GA^c$	[aagA/agaT]	2.67	$AG^{as}-GA^c$	[gagA/ggaT]	2.98	$AG^{at}-GA^c$	[gagA/tgaT]	2.48
		$AG^{az}-GA^c$	[tagA/tgaT]	2.68	$AG^{bb}-GA^c$	[aagA/cgaT]	2.98	$AG^b-GA^c$	[aagA/ggaT]	3.26
		$AG^c-GA^c$	[AagA/TgaT]	2.57						
		Summary for CDNN AG-GA: $k_{\min}=2.46$ $k_{\max}=9.67$ $\langle k \rangle=3.6$ $\sigma(k)=2.1$								
AG-GC	$6.62 \pm 1.5$	$AG^{ad}-GC$	[Cga/Gac]	7.68	$AG^{ah}-GC$	[Cga/Gag]	6.71	$AG^{al}-GC$	[AaG/TgC]	4.03
		$AG^e-GC$	[Cgc/Gac]	7.93	$AG^g-GC$	[CaG/GgC]	4.14	$AG^h-GC$	[Cgc/Gat]	7.49
		$AG^l-GC$	[Cgg/Gag]	8.59	$AG^m-GC$	[Cgg/Gat]	7.18	$AG^q-GC$	[Cgt/Gat]	7.10
		$AG^u-GC$	[Cga/Gaa]	5.36						
		Summary for CDNN AG-GC: $k_{\min}=4.03$ $k_{\max}=8.59$ $\langle k \rangle=6.6$ $\sigma(k)=1.5$								
AG-GG	$4.31 \pm 2.2$	$AG^{ab}-GG^f$	[tagA/tggT]	3.03	$AG^{ab}-GG^t$	[tagC/tggG]	2.84	$AG^{an}-GG^f$	[aagA/aggT]	3.23
		$AG^{an}-GG^t$	[aagC/aggG]	3.25	$AG^{ap}-GG^f$	[aagA/cggT]	6.72	$AG^{ap}-GG^t$	[aagC/cggG]	7.24
		$AG^{as}-GG^f$	[aagA/ggtT]	3.13	$AG^{as}-GG^t$	[aagC/gggG]	3.92	$AG^{au}-GG^{ae}$	[Aagg/Tggg]	3.11
		$AG^{au}-GG^{af}$	[Aagg/Tggt]	3.89	$AG^{au}-GG^{ak}$	[Aagt/Tggt]	3.81	$AG^{au}-GG^{an}$	[Aaga/Tggc]	4.03
		$AG^{au}-GG^c$	[Aaga/Tggg]	2.83	$AG^{au}-GG^f$	[AagA/TggT]	3.22	$AG^{au}-GG^s$	[Aagc/Tggc]	3.38
		$AG^{au}-GG^t$	[AagC/TggG]	10.2	$AG^{au}-GG^u$	[Aagc/Tggt]	3.66	$AG^{au}-GG^w$	[Aaga/Tgga]	3.92
		$AG^j-GG^f$	[cagA/cggT]	3.00	$AG^j-GG^t$	[cagC/cggG]	10.5	$AG^l-GG^{ae}$	[Cagg/Gggg]	3.60
		$AG^l-GG^{af}$	[Cagg/Gggt]	4.08	$AG^l-GG^{ak}$	[Cagt/Gggt]	3.04	$AG^l-GG^{an}$	[Caga/Gggc]	3.18
		$AG^l-GG^c$	[Caga/Gggg]	3.90	$AG^l-GG^f$	[CagA/GggT]	11.4	$AG^l-GG^s$	[Cagc/Gggc]	3.59
		$AG^l-GG^t$	[CagC/GggG]	7.99	$AG^l-GG^u$	[Cagc/Gggt]	2.78	$AG^l-GG^w$	[Caga/Ggga]	3.43
		$AG^n-GG^f$	[cagA/tggT]	3.37	$AG^n-GG^t$	[cagC/tggG]	3.44	$AG^x-GG^f$	[gagA/gggT]	3.18
		$AG^x-GG^t$	[gagC/gggG]	3.44	$AG^y-GG^f$	[gagA/tggT]	3.09	$AG^y-GG^t$	[gagC/tggG]	2.93
		Summary for CDNN AG-GG: $k_{\min}=2.78$ $k_{\max}=11.4$ $\langle k \rangle=4.3$ $\sigma(k)=2.2$								
AG-GT	$6.98 \pm 2.4$	$AG^{ac}-GT^{ah}$	[tagC/tgtG]	6.55	$AG^{ac}-GT^c$	[tagA/tgtT]	6.98	$AG^{ao}-GT^{ah}$	[aagC/agtG]	7.16

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$AG^{ao}-GT^c$	[aagA/agtT]	7.09	$AG^{ar}-GT^{ah}$	[aagC/cgtG]	18.7	$AG^{ar}-GT^c$	[aagA/cgtT]	10.3
		$AG^{at}-GT^{ah}$	[aagC/ggtG]	6.46	$AG^{at}-GT^c$	[aagA/ggtT]	5.05	$AG^{av}-GT^{ag}$	[AagC/Tgtc]	6.14
		$AG^{av}-GT^{ah}$	[AagC/TgtG]	11.6	$AG^{av}-GT^{ai}$	[Aagc/Tggt]	6.59	$AG^{av}-GT^{aj}$	[Aaga/Tgta]	6.40
		$AG^{av}-GT^{as}$	[Aagg/Tgtg]	4.89	$AG^{av}-GT^{at}$	[Aagg/Tggt]	5.53	$AG^{av}-GT^{az}$	[Aagt/Tggt]	7.05
		$AG^{av}-GT^b$	[Aaga/Tgtg]	6.90	$AG^{av}-GT^{bb}$	[Aaga/Tgtc]	5.11	$AG^{av}-GT^c$	[AagA/TgtT]	4.87
		$AG^k-GT^{ah}$	[cagC/cgtG]	6.66	$AG^k-GT^c$	[cagA/cgtT]	6.44	$AG^m-GT^{ag}$	[Cagc/Ggtc]	6.83
		$AG^m-GT^{ah}$	[CagC/GgtG]	7.44	$AG^m-GT^{ai}$	[Cagc/Gggt]	5.45	$AG^m-GT^{aj}$	[Caga/Ggta]	6.31
		$AG^m-GT^{as}$	[Cagg/Ggtg]	5.75	$AG^m-GT^{at}$	[Cagg/Gggt]	6.91	$AG^m-GT^{az}$	[Cagt/Gggt]	7.03
		$AG^m-GT^b$	[Caga/Ggtg]	6.09	$AG^m-GT^{bb}$	[Caga/Ggtc]	6.00	$AG^m-GT^c$	[CagA/GgtT]	6.51
		$AG^o-GT^{ah}$	[cagC/tgtG]	5.92	$AG^o-GT^c$	[cagA/tgtT]	7.08	$AG^y-GT^{ah}$	[gagC/ggtG]	6.94
		$AG^y-GT^c$	[gagA/ggtT]	6.46	$AG^z-GT^{ah}$	[gagC/tgtG]	8.80	$AG^z-GT^c$	[gagA/tgtT]	5.32
		Summary for CDNN AG-GT: $k_{\min}=4.87$ $k_{\max}=18.7$ $\langle k \rangle=7.0$ $\sigma(k)=2.4$								
AG-TA	$6.54 \pm 2.6$	$AG^{ak}-TA$	[Agc/Tac]	5.36	$AG^{al}-TA$	[CaT/GgA]	7.31	$AG^{am}-TA$	[Agc/Tat]	1.84
		$AG^{au}-TA$	[Aga/Taa]	6.68	$AG^{au}-TA$	[Agg/Tag]	12.4	$AG^{av}-TA$	[Agg/Tat]	8.18
		$AG^{ba}-TA$	[Agt/Tat]	6.47	$AG^{bc}-TA$	[Aga/Tac]	3.65	$AG^c-TA$	[Aga/Tag]	6.52
		$AG^r-TA$	[AaT/TgA]	7.03						
		Summary for CDNN AG-TA: $k_{\min}=1.84$ $k_{\max}=12.4$ $\langle k \rangle=6.5$ $\sigma(k)=2.6$								
AG-TC	$2.35 \pm 1.7$	$AG^{ae}-TC^{ah}$	[aatC/cgcG]	1.95	$AG^{ae}-TC^c$	[aatA/cgcT]	1.88	$AG^{ai}-TC^{ah}$	[aatC/ggcG]	1.59
		$AG^{ai}-TC^c$	[aatA/ggcT]	2.25	$AG^{am}-TC^{ag}$	[Aatc/Tgcc]	2.02	$AG^{am}-TC^{ah}$	[AatC/TgccG]	7.39
		$AG^{am}-TC^{ai}$	[Aatc/Tgct]	1.85	$AG^{am}-TC^{aj}$	[Aata/Tgca]	1.95	$AG^{am}-TC^{as}$	[Aatg/Tgcg]	1.90
		$AG^{am}-TC^{at}$	[Aatg/Tgct]	2.01	$AG^{am}-TC^{az}$	[Aatt/Tgct]	1.68	$AG^{am}-TC^b$	[Aata/Tgcc]	2.00
		$AG^{am}-TC^{bb}$	[Aata/Tgcc]	1.80	$AG^{am}-TC^c$	[AatA/TgcT]	1.57	$AG^f-TC^{ah}$	[catC/cgcG]	1.70
		$AG^f-TC^c$	[catA/cgcT]	2.32	$AG^h-TC^{ag}$	[Catc/Ggcc]	1.82	$AG^h-TC^{ah}$	[CatC/GgcG]	11.1
		$AG^h-TC^{ai}$	[Catc/Ggct]	2.16	$AG^h-TC^{aj}$	[Cata/Ggca]	2.34	$AG^h-TC^{as}$	[Catg/Ggcg]	1.98
		$AG^h-TC^{at}$	[Catg/Ggct]	1.71	$AG^h-TC^{az}$	[Catt/Ggct]	1.81	$AG^h-TC^b$	[Cata/Ggcg]	1.85
		$AG^h-TC^{bb}$	[Cata/Ggcc]	2.32	$AG^h-TC^c$	[CatA/GgcT]	2.05	$AG^i-TC^{ah}$	[catC/tgcG]	2.12
		$AG^i-TC^c$	[catA/tgcT]	2.24	$AG^n-TC^{ah}$	[gatC/ggcG]	2.01	$AG^n-TC^c$	[gatA/ggcT]	2.00
		$AG^o-TC^{ah}$	[gatC/tgcG]	1.80	$AG^o-TC^c$	[gatA/tgcT]	2.12	$AG^s-TC^{ah}$	[tatC/tgcG]	1.65
		$AG^s-TC^c$	[tatA/tgcT]	2.02	$AG^w-TC^{ah}$	[aatC/agcG]	1.63	$AG^w-TC^c$	[aatA/agcT]	2.06
		Summary for CDNN AG-TC: $k_{\min}=1.57$ $k_{\max}=11.1$ $\langle k \rangle=2.4$ $\sigma(k)=1.7$								
AG-TG	$10.1 \pm 6.1$	$AG^{ac}-TG^{ah}$	[tatC/tggG]	13.1	$AG^{ac}-TG^c$	[tata/tggT]	5.91	$AG^{ao}-TG^{ah}$	[aatC/aggG]	5.70
		$AG^{ao}-TG^c$	[aatA/aggT]	7.06	$AG^{ar}-TG^{ah}$	[aatC/cggG]	16.0	$AG^{ar}-TG^c$	[aatA/cggT]	7.63
		$AG^{at}-TG^{ah}$	[aatC/gggG]	5.66	$AG^{at}-TG^c$	[aatA/gggT]	6.35	$AG^{av}-TG^{ag}$	[Aatc/Tggc]	5.60
		$AG^{av}-TG^{ah}$	[AatC/TggG]	28.5	$AG^{av}-TG^{ai}$	[Aatc/Tggt]	17.9	$AG^{av}-TG^{aj}$	[Aata/Tgga]	6.20
		$AG^{av}-TG^{as}$	[Aatg/Tggg]	5.51	$AG^{av}-TG^{at}$	[Aatg/Tggt]	19.6	$AG^{av}-TG^{az}$	[Aatt/Tggt]	27.2
		$AG^{av}-TG^b$	[Aata/Tggg]	6.13	$AG^{av}-TG^{bb}$	[Aata/Tggc]	7.33	$AG^{av}-TG^c$	[AatA/TggT]	14.4
		$AG^k-TG^{ah}$	[catC/cggG]	17.0	$AG^k-TG^c$	[catA/cggT]	7.28	$AG^m-TG^{ag}$	[Catc/Gggc]	6.29
		$AG^m-TG^{ah}$	[CatC/GggG]	20.2	$AG^m-TG^{ai}$	[Catc/Gggt]	5.96	$AG^m-TG^{aj}$	[Cata/Ggga]	5.81
		$AG^m-TG^{as}$	[Catg/Gggg]	7.23	$AG^m-TG^{at}$	[Catg/Gggt]	5.43	$AG^m-TG^{az}$	[Catt/Gggt]	7.12
		$AG^m-TG^b$	[Cata/Gggg]	6.55	$AG^m-TG^{bb}$	[Cata/Gggc]	6.83	$AG^m-TG^c$	[CatA/GggT]	12.4
		$AG^o-TG^{ah}$	[catC/tggG]	11.6	$AG^o-TG^c$	[catA/tggT]	6.86	$AG^y-TG^{ah}$	[gatC/gggG]	6.46
		$AG^y-TG^c$	[gatA/gggT]	6.58	$AG^z-TG^{ah}$	[gatC/tggG]	11.9	$AG^z-TG^c$	[gatA/tggT]	5.87
		Summary for CDNN AG-TG: $k_{\min}=5.43$ $k_{\max}=28.5$ $\langle k \rangle=10$ $\sigma(k)=6.1$								
AG-TT	$9.28 \pm 5.4$	$AG^{ab}-TT^f$	[gatA/ggtT]	5.21	$AG^{ab}-TT^t$	[gatC/ggtG]	13.1	$AG^{ac}-TT^f$	[gatA/tgtT]	6.35
		$AG^{ac}-TT^t$	[gatC/tgtG]	23.5	$AG^{af}-TT^f$	[tata/tgtT]	6.51	$AG^{af}-TT^t$	[tatC/tgtG]	18.5
		$AG^{aw}-TT^f$	[aatA/agtT]	7.18	$AG^{aw}-TT^t$	[aatC/agtG]	5.30	$AG^{ax}-TT^f$	[aatA/cgtT]	5.75
		$AG^{ax}-TT^t$	[aatC/cgtG]	22.1	$AG^{az}-TT^f$	[aatA/ggtT]	6.69	$AG^{az}-TT^t$	[aatC/ggtG]	13.7
		$AG^{ba}-TT^{ae}$	[Aatg/Tgtg]	5.67	$AG^{ba}-TT^{af}$	[Aatg/Tggt]	5.97	$AG^{ba}-TT^{ak}$	[Aatt/Tggt]	6.85
		$AG^{ba}-TT^{an}$	[Aata/Tgtc]	6.05	$AG^{ba}-TT^c$	[Aata/Tgtg]	6.83	$AG^{ba}-TT^f$	[AatA/TgtT]	6.07
		$AG^{ba}-TT^s$	[Aatc/Tgtc]	5.35	$AG^{ba}-TT^t$	[AatC/TgtG]	18.0	$AG^{ba}-TT^u$	[Aatc/Tggt]	5.73
		$AG^{ba}-TT^w$	[Aata/Tgta]	5.71	$AG^p-TT^f$	[catA/cgtT]	7.19	$AG^p-TT^t$	[catC/cgtG]	14.9
		$AG^q-TT^{ae}$	[Catg/Ggtg]	6.97	$AG^q-TT^{af}$	[Catg/Gggt]	6.95	$AG^q-TT^{ak}$	[Catt/Gggt]	5.63
		$AG^q-TT^{an}$	[Cata/Ggtc]	5.98	$AG^q-TT^c$	[Cata/Ggtg]	5.72	$AG^q-TT^f$	[CatA/GgtT]	9.19

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$AG^q\text{-TT}^s$	[Catc/Ggtc]	7.39	$AG^q\text{-TT}^t$	[CatC/GgtG]	19.5	$AG^q\text{-TT}^u$	[Catc/Gggt]	7.21
		$AG^q\text{-TT}^w$	[Cata/Ggta]	5.65	$AG^s\text{-TT}^f$	[catA/tgtT]	6.67	$AG^s\text{-TT}^t$	[catC/tgtG]	19.2
		Summary for CDNN AG-TT: $k_{\min}=5.30$ $k_{\max}=23.5$ $\langle k \rangle=9.3$ $\sigma(k)=5.4$								
AT-AC	$2.34 \pm 0.41$	$AT\text{-}AC^{ak}$	[Aac/Tcc]	2.51	$AT\text{-}AC^{al}$	[CcT/GaA]	3.08	$AT\text{-}AC^{am}$	[Aac/Tct]	2.12
		$AT\text{-}AC^{aq}$	[Aaa/Tca]	2.48	$AT\text{-}AC^{au}$	[Aag/Tcg]	2.72	$AT\text{-}AC^{av}$	[Aag/Tct]	1.76
		$AT\text{-}AC^{ba}$	[Aat/Tct]	1.92	$AT\text{-}AC^{bc}$	[Aaa/Tcc]	1.78	$AT\text{-}AC^c$	[Aaa/Tcg]	2.35
		$AT\text{-}AC^r$	[AcT/TaA]	2.65						
		Summary for CDNN AT-AC: $k_{\min}=1.76$ $k_{\max}=3.08$ $\langle k \rangle=2.3$ $\sigma(k)=0.41$								
AT-AG	$1.47 \pm 0.85$	$AT\text{-}AG^{ak}$	[Aac/Tgc]	1.13	$AT\text{-}AG^{al}$	[CgT/GaA]	3.55	$AT\text{-}AG^{am}$	[Aac/Tgt]	1.13
		$AT\text{-}AG^{aq}$	[Aaa/Tga]	1.19	$AT\text{-}AG^{au}$	[Aag/Tgg]	0.846	$AT\text{-}AG^{av}$	[Aag/Tgt]	0.974
		$AT\text{-}AG^{ba}$	[Aat/Tgt]	1.04	$AT\text{-}AG^{bc}$	[Aaa/Tgc]	0.984	$AT\text{-}AG^c$	[Aaa/Tgg]	1.15
		$AT\text{-}AG^r$	[AgT/TaA]	2.65						
		Summary for CDNN AT-AG: $k_{\min}=0.846$ $k_{\max}=3.55$ $\langle k \rangle=1.5$ $\sigma(k)=0.85$								
AT-CC	$0.349 \pm 0.033$	$AT\text{-}CC^{ad}$	[Aca/Tca]	0.329	$AT\text{-}CC^{ag}$	[Aag/Tcg]	0.385	$AT\text{-}CC^{ah}$	[Aag/Tct]	0.397
		$AT\text{-}CC^{al}$	[Act/Tct]	0.293	$AT\text{-}CC^{at}$	[Aca/Tcc]	0.324	$AT\text{-}CC^f$	[Aca/Tcg]	0.332
		$AT\text{-}CC^k$	[TcT/AcA]	0.377	$AT\text{-}CC^v$	[Acc/Tcc]	0.386	$AT\text{-}CC^x$	[CcT/GcA]	0.335
		$AT\text{-}CC^y$	[Acc/Tct]	0.331						
		Summary for CDNN AT-CC: $k_{\min}=0.293$ $k_{\max}=0.397$ $\langle k \rangle=0.35$ $\sigma(k)=0.033$								
AT-CT	$1.95 \pm 0.21$	$AT\text{-}CT^{ak}$	[Acc/Ttc]	1.61	$AT\text{-}CT^{al}$	[CtT/GcA]	2.17	$AT\text{-}CT^{am}$	[Acc/Ttt]	1.96
		$AT\text{-}CT^{aq}$	[Aca/Tta]	1.89	$AT\text{-}CT^{au}$	[Aag/Ttg]	1.76	$AT\text{-}CT^{av}$	[Aag/Ttt]	1.90
		$AT\text{-}CT^{ba}$	[Act/Ttt]	1.94	$AT\text{-}CT^{bc}$	[Aca/Ttc]	1.88	$AT\text{-}CT^c$	[Aca/Ttg]	1.92
		$AT\text{-}CT^r$	[AtT/TcA]	2.44						
		Summary for CDNN AT-CT: $k_{\min}=1.76$ $k_{\max}=2.44$ $\langle k \rangle=1.9$ $\sigma(k)=0.21$								
AT-GG	$2.41 \pm 1.2$	$AT\text{-}GG^{ad}$	[Aga/Tga]	2.26	$AT\text{-}GG^{ag}$	[Aag/Tgg]	1.70	$AT\text{-}GG^{ah}$	[Aag/Tgt]	1.68
		$AT\text{-}GG^{al}$	[Agt/Tgt]	2.10	$AT\text{-}GG^{at}$	[Aga/Tgc]	1.70	$AT\text{-}GG^f$	[Aga/Tgg]	1.72
		$AT\text{-}GG^k$	[TgT/AgA]	5.43	$AT\text{-}GG^v$	[Aag/Tgc]	2.14	$AT\text{-}GG^x$	[CgT/GgA]	3.99
		$AT\text{-}GG^y$	[Aag/Tgt]	1.40						
		Summary for CDNN AT-GG: $k_{\min}=1.40$ $k_{\max}=5.43$ $\langle k \rangle=2.4$ $\sigma(k)=1.2$								
AT-GT	$2.51 \pm 0.45$	$AT\text{-}GT^{ak}$	[Aag/Ttc]	2.83	$AT\text{-}GT^{al}$	[CtT/GgA]	2.33	$AT\text{-}GT^{am}$	[Aag/Ttt]	2.75
		$AT\text{-}GT^{aq}$	[Aga/Tta]	2.84	$AT\text{-}GT^{au}$	[Aag/Ttg]	2.27	$AT\text{-}GT^{av}$	[Aag/Ttt]	2.12
		$AT\text{-}GT^{ba}$	[Agt/Ttt]	2.29	$AT\text{-}GT^{bc}$	[Aga/Ttc]	2.12	$AT\text{-}GT^c$	[Aga/Ttg]	2.02
		$AT\text{-}GT^r$	[AtT/TgA]	3.57						
		Summary for CDNN AT-GT: $k_{\min}=2.02$ $k_{\max}=3.57$ $\langle k \rangle=2.5$ $\sigma(k)=0.45$								
AT-TC	$2.13 \pm 0.40$	$AT\text{-}TC^{ak}$	[Atc/Tcc]	2.16	$AT\text{-}TC^{al}$	[CcT/GtA]	1.83	$AT\text{-}TC^{am}$	[Atc/Tct]	1.78
		$AT\text{-}TC^{aq}$	[Ata/Tca]	1.71	$AT\text{-}TC^{au}$	[Aag/Tcg]	2.21	$AT\text{-}TC^{av}$	[Aag/Tct]	2.08
		$AT\text{-}TC^{ba}$	[Att/Tct]	2.15	$AT\text{-}TC^{bc}$	[Aata/Tcc]	1.76	$AT\text{-}TC^c$	[Aata/Tcg]	2.48
		$AT\text{-}TC^r$	[AcT/TtA]	3.12						
		Summary for CDNN AT-TC: $k_{\min}=1.71$ $k_{\max}=3.12$ $\langle k \rangle=2.1$ $\sigma(k)=0.40$								
AT-TG	$5.36 \pm 1.1$	$AT\text{-}TG^{ak}$	[Atc/Tgc]	4.89	$AT\text{-}TG^{al}$	[CgT/GtA]	6.72	$AT\text{-}TG^{am}$	[Atc/Tgt]	5.10
		$AT\text{-}TG^{aq}$	[Aata/Tga]	5.08	$AT\text{-}TG^{au}$	[Aag/Tgg]	5.36	$AT\text{-}TG^{av}$	[Aag/Tgt]	5.06
		$AT\text{-}TG^{ba}$	[Att/Tgt]	5.28	$AT\text{-}TG^{bc}$	[Aata/Tgc]	3.08	$AT\text{-}TG^c$	[Aata/Tgg]	5.33
		$AT\text{-}TG^r$	[AgT/TtA]	7.68						
		Summary for CDNN AT-TG: $k_{\min}=3.08$ $k_{\max}=7.68$ $\langle k \rangle=5.4$ $\sigma(k)=1.1$								
AT-TT	$3.68 \pm 0.49$	$AT\text{-}TT^{ad}$	[Aata/Tta]	3.26	$AT\text{-}TT^{ag}$	[Aag/Ttg]	3.99	$AT\text{-}TT^{ah}$	[Aag/Ttt]	4.05
		$AT\text{-}TT^{al}$	[Att/Ttt]	4.38	$AT\text{-}TT^{at}$	[Aata/Ttc]	3.52	$AT\text{-}TT^f$	[Aata/Ttg]	2.92
		$AT\text{-}TT^k$	[TtT/AtA]	3.93	$AT\text{-}TT^v$	[Atc/Ttc]	3.86	$AT\text{-}TT^x$	[CtT/GtA]	4.03
		$AT\text{-}TT^y$	[Atc/Ttt]	2.89						
		Summary for CDNN AT-TT: $k_{\min}=2.89$ $k_{\max}=4.38$ $\langle k \rangle=3.7$ $\sigma(k)=0.49$								
CA-AC	$2.73 \pm 0.29$	$CA^{aa}\text{-}AC^{ad}$	[ccaC/cacG]	2.72	$CA^{aa}\text{-}AC^{bc}$	[ccaA/cacT]	2.86	$CA^{ad}\text{-}AC^{ad}$	[CcaC/GacG]	2.58
		$CA^{ad}\text{-}AC^{ae}$	[Ccac/Gact]	2.42	$CA^{ad}\text{-}AC^{ap}$	[Ccac/Gacc]	3.09	$CA^{ad}\text{-}AC^{ar}$	[Ccac/Gact]	2.98
		$CA^{ad}\text{-}AC^{ax}$	[Ccat/Gact]	3.03	$CA^{ad}\text{-}AC^{ay}$	[Ccaa/Gacc]	3.13	$CA^{ad}\text{-}AC^{bb}$	[Ccaa/Gacc]	2.79
		$CA^{ad}\text{-}AC^{bc}$	[CcaA/GacT]	2.21	$CA^{ad}\text{-}AC^v$	[Ccaa/Gaca]	2.91	$CA^{ae}\text{-}AC^{bc}$	[ccaA/tacT]	2.43

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$CA^{ap}-AC^{bc}$	[gcaA/gacT]	2.97	$CA^{ar}-AC^{bc}$	[gcaA/tacT]	3.01	$CA^{ax}-AC^{bc}$	[tcaA/tacT]	2.50
		$CA^{ay}-AC^{bc}$	[acaA/cacT]	2.54	$CA^{bb}-AC^{bc}$	[acaA/gacT]	2.54	$CA^{bc}-AC^{bc}$	[AcaA/TacT]	2.19
		$CA^{bc}-AC^v$	[Acaa/Taca]	2.97						
		Summary for CDNN CA-AC:		$k_{\min}=2.19$			$k_{\max}=3.13$	$\langle k \rangle=2.7$		$\sigma(k)=0.29$
CA-AG	$3.37 \pm 2.8$	$CA^{ag}-AG^{ad}$	[ccaC/cagG]	2.62	$CA^{ag}-AG^{bc}$	[ccaA/cagT]	2.37	$CA^{ah}-AG^{aa}$	[Ccac/Gagc]	3.42
		$CA^{ah}-AG^{ad}$	[CcaC/GagG]	2.63	$CA^{ah}-AG^{ae}$	[Ccac/Gagt]	12.0	$CA^{ah}-AG^{ap}$	[Ccag/Gagg]	3.09
		$CA^{ah}-AG^{ar}$	[Ccag/Gagt]	2.66	$CA^{ah}-AG^{ax}$	[Ccat/Gagt]	3.02	$CA^{ah}-AG^{ay}$	[Ccaa/Gagc]	2.14
		$CA^{ah}-AG^{bb}$	[Ccaa/Gagg]	2.56	$CA^{ah}-AG^{bc}$	[CcaA/GagT]	2.61	$CA^{ah}-AG^v$	[Ccaa/Gaga]	2.58
		$CA^{ai}-AG^{ad}$	[ccaC/tagG]	2.39	$CA^{ai}-AG^{bc}$	[ccaA/tagT]	2.75	$CA^{aj}-AG^{ad}$	[acaC/aagG]	2.61
		$CA^{aj}-AG^{bc}$	[acaA/aagT]	2.85	$CA^{as}-AG^{ad}$	[gcaC/gagG]	2.46	$CA^{as}-AG^{bc}$	[gcaA/gagT]	2.97
		$CA^{at}-AG^{ad}$	[gcaC/tagG]	2.20	$CA^{at}-AG^{bc}$	[gcaA/tagT]	2.90	$CA^{az}-AG^{ad}$	[tcaC/tagG]	3.06
		$CA^{az}-AG^{bc}$	[tcaA/tagT]	2.21	$CA^b-AG^{ad}$	[acaC/gagG]	2.34	$CA^{bb}-AG^{ad}$	[acaC/cagG]	2.55
		$CA^{bb}-AG^{bc}$	[acaA/cagT]	3.01	$CA^b-AG^{bc}$	[acaA/gagT]	3.20	$CA^c-AG^{aa}$	[Acac/Tagc]	2.72
		$CA^c-AG^{ad}$	[AcaC/TagG]	3.06	$CA^c-AG^{ae}$	[Acac/Tagt]	16.9	$CA^c-AG^{ap}$	[Acag/Tagg]	2.42
		$CA^c-AG^{ar}$	[Acag/Tagt]	2.37	$CA^c-AG^{ax}$	[Acat/Tagt]	3.11	$CA^c-AG^{ay}$	[Acaa/Tagc]	2.85
		$CA^c-AG^{bb}$	[Acaa/Tagg]	2.82	$CA^c-AG^{bc}$	[AcaA/TagT]	2.93	$CA^c-AG^v$	[Acaa/Taga]	2.92
		Summary for CDNN CA-AG:		$k_{\min}=2.14$			$k_{\max}=16.9$	$\langle k \rangle=3.4$		$\sigma(k)=2.8$
CA-AT	$1.36 \pm 0.80$	$CA^{ak}-AT$	[TAc/Acc]	0.787	$CA^{al}-AT$	[CcA/GaT]	1.11	$CA^{am}-AT$	[TAc/Act]	1.02
		$CA^{aq}-AT$	[Taa/Aca]	2.55	$CA^{au}-AT$	[Tag/Acg]	0.653	$CA^{av}-AT$	[Tag/Act]	0.800
		$CA^{ba}-AT$	[Tat/Act]	0.902	$CA^{bc}-AT$	[Taa/Acc]	1.08	$CA^c-AT$	[Taa/Acg]	1.52
		$CA^r-AT$	[AcA/TaT]	3.18						
		Summary for CDNN CA-AT:		$k_{\min}=0.653$			$k_{\max}=3.18$	$\langle k \rangle=1.4$		$\sigma(k)=0.80$
CA-CC	$2.37 \pm 0.25$	$CA^{aa}-CC^{at}$	[accA/cacT]	1.99	$CA^{aa}-CC^q$	[accC/cacG]	2.55	$CA^{ag}-CC^{at}$	[accA/gacT]	2.02
		$CA^{ag}-CC^q$	[accC/gacG]	1.87	$CA^{ak}-CC^{ab}$	[Accg/Tacg]	2.63	$CA^{ak}-CC^{ac}$	[Accg/Tact]	2.48
		$CA^{ak}-CC^{aj}$	[Acct/Tact]	2.78	$CA^{ak}-CC^{am}$	[Acca/Tacc]	2.44	$CA^{ak}-CC^{an}$	[Acca/Tacc]	2.50
		$CA^{ak}-CC^{at}$	[AccA/TacT]	2.32	$CA^{ak}-CC^o$	[Acca/Taca]	2.66	$CA^{ak}-CC^p$	[Accc/Tacc]	2.60
		$CA^{ak}-CC^q$	[AccC/TacG]	2.38	$CA^{ak}-CC^r$	[Accc/Tact]	2.77	$CA^d-CC^{at}$	[cccA/cacT]	2.56
		$CA^d-CC^q$	[cccC/cacG]	2.52	$CA^e-CC^{ab}$	[Cccg/Gacg]	2.63	$CA^e-CC^{ac}$	[Cccg/Gact]	2.01
		$CA^e-CC^{aj}$	[Ccct/Gact]	2.22	$CA^e-CC^{am}$	[Ccca/Gacc]	2.24	$CA^e-CC^{an}$	[Ccca/Gacc]	2.38
		$CA^e-CC^{at}$	[CccA/GacT]	2.26	$CA^e-CC^o$	[Ccca/Gaca]	2.39	$CA^e-CC^p$	[Cccc/Gacc]	2.30
		$CA^e-CC^q$	[CccC/GacG]	2.07	$CA^e-CC^r$	[Cccc/Gact]	2.40	$CA^f-CC^{at}$	[cccA/tacT]	2.65
		$CA^f-CC^q$	[cccC/tacG]	1.88	$CA^j-CC^{at}$	[gccA/gacT]	2.49	$CA^j-CC^q$	[gccC/gacG]	2.63
		$CA^k-CC^{at}$	[gccA/tacT]	2.31	$CA^k-CC^q$	[gccC/tacG]	2.46	$CA^p-CC^{at}$	[tccA/tacT]	2.39
		$CA^p-CC^q$	[tccC/tacG]	2.58	$CA^t-CC^{at}$	[accA/aacT]	2.16	$CA^t-CC^q$	[accC/aacG]	1.92
		Summary for CDNN CA-CC:		$k_{\min}=1.87$			$k_{\max}=2.78$	$\langle k \rangle=2.4$		$\sigma(k)=0.25$
CA-CG	$1.10 \pm 0.38$	$CA^{ad}-CG$	[Gaa/Ccc]	0.804	$CA^{ah}-CG$	[Gaa/Ccg]	0.862	$CA^{al}-CG$	[Acc/TaG]	1.94
		$CA^e-CG$	[Gac/Ccc]	0.906	$CA^g-CG$	[Ccc/GaG]	1.75	$CA^h-CG$	[Gac/Cct]	0.999
		$CA^l-CG$	[Gag/Ccg]	0.981	$CA^m-CG$	[Gag/Cct]	0.853	$CA^q-CG$	[Gat/Cct]	0.918
		$CA^u-CG$	[Gaa/Cca]	0.960						
		Summary for CDNN CA-CG:		$k_{\min}=0.853$			$k_{\max}=1.94$	$\langle k \rangle=1.1$		$\sigma(k)=0.38$
CA-CT	$5.29 \pm 11.$	$CA^{ae}-CT^{ad}$	[accC/cacT]	3.40	$CA^{ae}-CT^{bc}$	[accA/cacT]	2.74	$CA^{ai}-CT^{ad}$	[accC/gatG]	2.92
		$CA^{ai}-CT^{bc}$	[accA/gatT]	3.74	$CA^{am}-CT^{aa}$	[Accc/Tatc]	3.27	$CA^{am}-CT^{ad}$	[AccC/TatG]	3.97
		$CA^{am}-CT^{ae}$	[Accc/Tatt]	3.64	$CA^{am}-CT^{ap}$	[Accg/Tatg]	3.54	$CA^{am}-CT^{ar}$	[Accg/Tatt]	3.02
		$CA^{am}-CT^{ax}$	[Acct/Tatt]	2.87	$CA^{am}-CT^{ay}$	[Acca/Tatc]	3.19	$CA^{am}-CT^{bb}$	[Acca/Tatg]	3.29
		$CA^{am}-CT^{bc}$	[AccA/TatT]	3.21	$CA^{am}-CT^v$	[Acca/Tata]	3.85	$CA^f-CT^{ad}$	[cccC/cacG]	3.25
		$CA^f-CT^{bc}$	[cccA/cacT]	71.8	$CA^h-CT^{aa}$	[Cccc/Gatc]	3.76	$CA^h-CT^{ad}$	[CccC/GatG]	3.90
		$CA^h-CT^{ae}$	[Cccc/Gatt]	3.65	$CA^h-CT^{ap}$	[Cccg/Gatg]	3.24	$CA^h-CT^{ar}$	[Cccg/Gatt]	3.49
		$CA^h-CT^{ax}$	[Ccct/Gatt]	3.10	$CA^h-CT^{ay}$	[Ccca/Gatc]	3.98	$CA^h-CT^{bb}$	[Ccca/Gatg]	3.22
		$CA^h-CT^{bc}$	[CccA/GatT]	2.77	$CA^h-CT^v$	[Ccca/Gata]	3.64	$CA^i-CT^{ad}$	[cccC/tacT]	3.03
		$CA^i-CT^{bc}$	[cccA/tatT]	3.67	$CA^n-CT^{ad}$	[gccC/gatG]	3.19	$CA^n-CT^{bc}$	[gccA/gatT]	2.81
		$CA^o-CT^{ad}$	[gccC/tacT]	3.23	$CA^o-CT^{bc}$	[gccA/tatT]	3.69	$CA^s-CT^{ad}$	[tccC/tacT]	3.72
		$CA^s-CT^{bc}$	[tccA/tatT]	3.10	$CA^w-CT^{ad}$	[accC/aatG]	3.83	$CA^w-CT^{bc}$	[accA/aatT]	3.91
		Summary for CDNN CA-CT:		$k_{\min}=2.74$			$k_{\max}=71.8$	$\langle k \rangle=5.3$		$\sigma(k)=11.$

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$		
CA-GC	0.844 ± 0.44	$CA^{ad}\text{-GC}$	[Caa/Gcc]	0.390	$CA^{ah}\text{-GC}$	[Caa/Gcg]	1.58	$CA^{al}\text{-GC}$	[AcG/TaC]	0.923		
		$CA^e\text{-GC}$	[Cac/Gcc]	0.0166	$CA^g\text{-GC}$	[Ccg/GaC]	0.836	$CA^h\text{-GC}$	[Cac/Gct]	0.363		
		$CA^l\text{-GC}$	[Cag/Gcg]	1.14	$CA^m\text{-GC}$	[Cag/Gct]	1.13	$CA^q\text{-GC}$	[Cat/Gct]	1.01		
		$CA^u\text{-GC}$	[Caa/Gca]	1.05								
Summary for CDNN CA-GC: $k_{\min}=0.0166$ $k_{\max}=1.58$ $\langle k \rangle=0.84$ $\sigma(k)=0.44$												
CA-GG	4.17 ± 2.4	$CA^{ab}\text{-GG}^{at}$	[tcgA/tagT]	3.73	$CA^{ab}\text{-GG}^q$	[tcgC/tagG]	11.5	$CA^{an}\text{-GG}^{at}$	[acgA/aagT]	3.92		
		$CA^{an}\text{-GG}^q$	[acgC/aagG]	3.17	$CA^{ap}\text{-GG}^{at}$	[acgA/cagT]	4.24	$CA^{ap}\text{-GG}^q$	[acgC/cagG]	3.32		
		$CA^{as}\text{-GG}^{at}$	[acgA/gagT]	3.95	$CA^{as}\text{-GG}^q$	[acgC/gagG]	3.69	$CA^{au}\text{-GG}^{ab}$	[Acgg/Tagg]	3.13		
		$CA^{au}\text{-GG}^{ac}$	[Acgg/Tagt]	3.03	$CA^{au}\text{-GG}^{aj}$	[Acgt/Tagt]	2.93	$CA^{au}\text{-GG}^{am}$	[Acga/Tagc]	4.70		
		$CA^{au}\text{-GG}^{an}$	[Acga/Tagg]	3.78	$CA^{au}\text{-GG}^{at}$	[AcgA/TagT]	2.78	$CA^{au}\text{-GG}^o$	[Acga/Taga]	3.00		
		$CA^{au}\text{-GG}^p$	[Acgc/Tagc]	3.57	$CA^{au}\text{-GG}^q$	[AcgC/TagG]	6.52	$CA^{au}\text{-GG}^r$	[Acgc/Tagt]	4.68		
		$CA^j\text{-GG}^{at}$	[ccgA/cagT]	3.43	$CA^j\text{-GG}^q$	[ccgC/cagG]	3.25	$CA^l\text{-GG}^{ab}$	[CcgG/Gagg]	3.25		
		$CA^l\text{-GG}^{ac}$	[CcgG/Gagt]	3.30	$CA^l\text{-GG}^{aj}$	[Ccgt/Gagt]	3.67	$CA^l\text{-GG}^{am}$	[CcgA/Gagc]	4.28		
		$CA^l\text{-GG}^{an}$	[CcgA/Gagg]	3.56	$CA^l\text{-GG}^{at}$	[CcgA/GagT]	4.17	$CA^l\text{-GG}^o$	[CcgA/Gaga]	2.88		
		$CA^l\text{-GG}^p$	[CcgC/Gagc]	3.30	$CA^l\text{-GG}^q$	[CcgC/GagG]	3.75	$CA^l\text{-GG}^r$	[CcgC/Gagt]	3.57		
		$CA^n\text{-GG}^{at}$	[ccgA/tagT]	3.09	$CA^n\text{-GG}^q$	[ccgC/tagG]	15.1	$CA^x\text{-GG}^{at}$	[gcgA/gagT]	3.49		
		$CA^x\text{-GG}^q$	[gcgC/gagG]	4.03	$CA^y\text{-GG}^{at}$	[gcgA/tagT]	3.10	$CA^y\text{-GG}^q$	[gcgC/tagG]	3.40		
		Summary for CDNN CA-GG: $k_{\min}=2.78$ $k_{\max}=15.1$ $\langle k \rangle=4.2$ $\sigma(k)=2.4$										
CA-GT	1.61 ± 0.19	$CA^{ac}\text{-GT}^{ad}$	[tcgC/tatG]	1.83	$CA^{ac}\text{-GT}^{bc}$	[tcgA/tatT]	1.31	$CA^{ao}\text{-GT}^{ad}$	[acgC/aatG]	1.87		
		$CA^{ao}\text{-GT}^{bc}$	[acgA/aatT]	1.80	$CA^{ar}\text{-GT}^{ad}$	[acgC/catG]	1.81	$CA^{ar}\text{-GT}^{bc}$	[acgA/catT]	1.92		
		$CA^{at}\text{-GT}^{ad}$	[acgC/gatG]	1.44	$CA^{at}\text{-GT}^{bc}$	[acgA/gatT]	1.42	$CA^{av}\text{-GT}^{aa}$	[Acgc/Tatc]	1.72		
		$CA^{av}\text{-GT}^{ad}$	[AcgC/TatG]	1.47	$CA^{av}\text{-GT}^{ae}$	[Acgc/Tatt]	1.62	$CA^{av}\text{-GT}^{ap}$	[Acgg/Tagg]	1.72		
		$CA^{av}\text{-GT}^{ar}$	[Acgg/Tatt]	1.34	$CA^{av}\text{-GT}^{ax}$	[Acgt/Tatt]	1.51	$CA^{av}\text{-GT}^{ay}$	[Acga/Tatc]	1.66		
		$CA^{av}\text{-GT}^{bb}$	[Acga/Tagt]	1.62	$CA^{av}\text{-GT}^{bc}$	[AcgA/TatT]	1.83	$CA^{av}\text{-GT}^v$	[Acga/Tata]	1.80		
		$CA^k\text{-GT}^{ad}$	[ccgC/catG]	1.33	$CA^k\text{-GT}^{bc}$	[ccgA/catT]	1.55	$CA^m\text{-GT}^{aa}$	[CcgC/Gatc]	1.44		
		$CA^m\text{-GT}^{ad}$	[CcgC/GatG]	1.59	$CA^m\text{-GT}^{ae}$	[CcgC/Gatt]	1.41	$CA^m\text{-GT}^{ap}$	[CcgG/Gagg]	1.62		
		$CA^m\text{-GT}^{ar}$	[CcgG/Gatt]	1.41	$CA^m\text{-GT}^{ax}$	[Ccgt/Gatt]	1.48	$CA^m\text{-GT}^{ay}$	[CcgA/Gatc]	1.45		
		$CA^m\text{-GT}^{bb}$	[Coga/Gatg]	1.91	$CA^m\text{-GT}^{bc}$	[CcgA/GatT]	1.34	$CA^m\text{-GT}^v$	[CcgA/Gata]	1.83		
		$CA^o\text{-GT}^{ad}$	[ccgC/tatG]	1.88	$CA^o\text{-GT}^{bc}$	[ccgA/tatT]	1.36	$CA^y\text{-GT}^{ad}$	[gcgC/gatG]	1.66		
		$CA^y\text{-GT}^{bc}$	[gcgA/gatT]	1.72	$CA^z\text{-GT}^{ad}$	[gcgC/tatG]	1.89	$CA^z\text{-GT}^{bc}$	[gcgA/tatT]	1.52		
		Summary for CDNN CA-GT: $k_{\min}=1.31$ $k_{\max}=1.92$ $\langle k \rangle=1.6$ $\sigma(k)=0.19$										
		CA-TC	2.12 ± 0.25	$CA^{ae}\text{-TC}^{ad}$	[actC/cacG]	2.48	$CA^{ae}\text{-TC}^{bc}$	[actA/cacT]	2.25	$CA^{ai}\text{-TC}^{ad}$	[actC/gacG]	2.16
				$CA^{ai}\text{-TC}^{bc}$	[actA/gacT]	2.35	$CA^{am}\text{-TC}^{aa}$	[Actc/Tagc]	2.18	$CA^{am}\text{-TC}^{ad}$	[ActC/TacG]	1.85
$CA^{am}\text{-TC}^{ae}$	[Actc/Tact]			2.08	$CA^{am}\text{-TC}^{ap}$	[Actg/Tagc]	2.14	$CA^{am}\text{-TC}^{ar}$	[Actg/Tact]	2.15		
$CA^{am}\text{-TC}^{ax}$	[Actt/Tact]			1.70	$CA^{am}\text{-TC}^{ay}$	[Acta/Tacc]	2.14	$CA^{am}\text{-TC}^{bb}$	[Acta/Tagc]	2.01		
$CA^{am}\text{-TC}^{bc}$	[ActA/TacT]			2.26	$CA^{am}\text{-TC}^v$	[Acta/Taca]	2.06	$CA^f\text{-TC}^{ad}$	[cctC/cacG]	2.32		
$CA^f\text{-TC}^{bc}$	[cctA/cacT]			2.37	$CA^h\text{-TC}^{aa}$	[Cctc/Gacc]	1.84	$CA^h\text{-TC}^{ad}$	[CctC/GacG]	1.73		
$CA^h\text{-TC}^{ae}$	[Cctc/Gact]			2.23	$CA^h\text{-TC}^{ap}$	[Cctg/Gacg]	2.44	$CA^h\text{-TC}^{ar}$	[Cctg/Gact]	2.11		
$CA^h\text{-TC}^{ax}$	[Cctt/Gact]			1.96	$CA^h\text{-TC}^{ay}$	[Ccta/Gacc]	2.02	$CA^h\text{-TC}^{bb}$	[Ccta/Gacg]	2.25		
$CA^h\text{-TC}^{bc}$	[CctA/GacT]			2.33	$CA^h\text{-TC}^v$	[Ccta/Gaca]	1.73	$CA^i\text{-TC}^{ad}$	[cctC/tacG]	1.72		
$CA^i\text{-TC}^{bc}$	[cctA/tacT]			2.34	$CA^n\text{-TC}^{ad}$	[gctC/gacG]	1.69	$CA^n\text{-TC}^{bc}$	[gctA/gacT]	2.00		
$CA^o\text{-TC}^{ad}$	[gctC/tacG]			2.49	$CA^o\text{-TC}^{bc}$	[gctA/tacT]	1.81	$CA^s\text{-TC}^{ad}$	[tctC/tacG]	2.21		
$CA^s\text{-TC}^{bc}$	[tctA/tacT]			2.46	$CA^w\text{-TC}^{ad}$	[actC/aacG]	1.77	$CA^w\text{-TC}^{bc}$	[actA/aacT]	2.61		
Summary for CDNN CA-TC: $k_{\min}=1.69$ $k_{\max}=2.61$ $\langle k \rangle=2.1$ $\sigma(k)=0.25$												
CA-TG	7.24 ± 4.2			$CA^{ac}\text{-TG}^{ad}$	[tctC/tagG]	5.35	$CA^{ac}\text{-TG}^{bc}$	[tctA/tagT]	4.67	$CA^{ao}\text{-TG}^{ad}$	[actC/aagG]	4.79
				$CA^{ao}\text{-TG}^{bc}$	[actA/aagT]	5.59	$CA^{ar}\text{-TG}^{ad}$	[actC/cagG]	5.49	$CA^{ar}\text{-TG}^{bc}$	[actA/cagT]	5.44
		$CA^{at}\text{-TG}^{ad}$	[actC/gagG]	4.89	$CA^{at}\text{-TG}^{bc}$	[actA/gagT]	5.97	$CA^{av}\text{-TG}^{aa}$	[Actc/Tagc]	4.73		
		$CA^{av}\text{-TG}^{ad}$	[ActC/TagG]	6.05	$CA^{av}\text{-TG}^{ae}$	[Actc/Tagt]	16.6	$CA^{av}\text{-TG}^{ap}$	[Actg/Tagg]	18.4		
		$CA^{av}\text{-TG}^{ar}$	[Actg/Tagt]	5.19	$CA^{av}\text{-TG}^{ax}$	[Actt/Tagt]	6.06	$CA^{av}\text{-TG}^{ay}$	[Acta/Tagc]	15.8		
		$CA^{av}\text{-TG}^{bb}$	[Acta/Tagg]	9.93	$CA^{av}\text{-TG}^{bc}$	[ActA/TagT]	5.44	$CA^{av}\text{-TG}^v$	[Acta/Taga]	20.9		
		$CA^k\text{-TG}^{ad}$	[cctC/cagG]	5.17	$CA^k\text{-TG}^{bc}$	[cctA/cagT]	5.44	$CA^m\text{-TG}^{aa}$	[Cctc/Gagc]	5.08		
		$CA^m\text{-TG}^{ad}$	[CctC/GagG]	5.90	$CA^m\text{-TG}^{ae}$	[Cctc/Gagt]	7.93	$CA^m\text{-TG}^{ap}$	[Cctg/Gagg]	5.12		
		$CA^m\text{-TG}^{ar}$	[Cctg/Gagt]	4.65	$CA^m\text{-TG}^{ax}$	[Cctt/Gagt]	6.00	$CA^m\text{-TG}^{ay}$	[Ccta/Gagc]	6.11		

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$		
CA-TT	$1.67 \pm 0.21$	$CA^m\text{-TG}^{bb}$	[Ccta/Gagg]	4.47	$CA^m\text{-TG}^{bc}$	[CctA/GagT]	5.22	$CA^m\text{-TG}^v$	[Ccta/Gaga]	4.91		
		$CA^o\text{-TG}^{ad}$	[cctC/tagG]	12.3	$CA^o\text{-TG}^{bc}$	[cctA/tagT]	4.65	$CA^y\text{-TG}^{ad}$	[gctC/gagG]	4.71		
		$CA^y\text{-TG}^{bc}$	[gctA/gagT]	5.52	$CA^z\text{-TG}^{ad}$	[gctC/tagG]	6.16	$CA^z\text{-TG}^{bc}$	[gctA/tagT]	9.97		
		Summary for CDNN CA-TG: $k_{\min}=4.47$ $k_{\max}=20.9$ $\langle k \rangle=7.2$ $\sigma(k)=4.2$										
		$CA^{ab}\text{-TT}^{at}$	[gctA/gatT]	1.45	$CA^{ab}\text{-TT}^q$	[gctC/gatG]	1.49	$CA^{ac}\text{-TT}^{at}$	[gctA/tatT]	1.89		
		$CA^{ac}\text{-TT}^q$	[gctC/tatG]	1.75	$CA^{af}\text{-TT}^{at}$	[tctA/tatT]	1.39	$CA^{af}\text{-TT}^q$	[tctC/tatG]	1.62		
		$CA^{aw}\text{-TT}^{at}$	[actA/aatT]	1.85	$CA^{aw}\text{-TT}^q$	[actC/aatG]	1.83	$CA^{ax}\text{-TT}^{at}$	[actA/catT]	1.78		
		$CA^{ax}\text{-TT}^q$	[actC/catG]	1.64	$CA^{az}\text{-TT}^{at}$	[actA/gatT]	1.57	$CA^{az}\text{-TT}^q$	[actC/gatG]	1.39		
		$CA^{ba}\text{-TT}^{ab}$	[Actg/Tatg]	1.76	$CA^{ba}\text{-TT}^{ac}$	[Actg/Tatt]	1.75	$CA^{ba}\text{-TT}^{aj}$	[Actt/Tatt]	1.66		
		$CA^{ba}\text{-TT}^{am}$	[Acta/Tatc]	1.39	$CA^{ba}\text{-TT}^{an}$	[Acta/Tatg]	1.47	$CA^{ba}\text{-TT}^{at}$	[ActA/TatT]	2.01		
		$CA^{ba}\text{-TT}^o$	[Acta/Tata]	1.82	$CA^{ba}\text{-TT}^p$	[Actc/Tatc]	1.99	$CA^{ba}\text{-TT}^q$	[ActC/TatG]	1.40		
		$CA^{ba}\text{-TT}^r$	[Actc/Tatt]	1.63	$CA^p\text{-TT}^{at}$	[cctA/catT]	1.57	$CA^p\text{-TT}^q$	[cctC/catG]	2.03		
		$CA^q\text{-TT}^{ab}$	[Cctg/Gatg]	1.77	$CA^q\text{-TT}^{ac}$	[Cctg/Gatt]	2.03	$CA^q\text{-TT}^{aj}$	[Cctt/Gatt]	1.46		
		$CA^q\text{-TT}^{am}$	[Ccta/Gatc]	1.47	$CA^q\text{-TT}^{an}$	[Ccta/Gatg]	1.59	$CA^q\text{-TT}^{at}$	[CctA/GatT]	1.56		
		$CA^q\text{-TT}^o$	[Ccta/Gata]	1.94	$CA^q\text{-TT}^p$	[Cctc/Gatc]	1.45	$CA^q\text{-TT}^q$	[CctC/GatG]	1.52		
		$CA^q\text{-TT}^r$	[Cctc/Gatt]	1.52	$CA^s\text{-TT}^{at}$	[cctA/tatT]	1.58	$CA^s\text{-TT}^q$	[cctC/tatG]	2.02		
		Summary for CDNN CA-TT: $k_{\min}=1.39$ $k_{\max}=2.03$ $\langle k \rangle=1.7$ $\sigma(k)=0.21$										
CC-AG	$2.56 \pm 2.2$	$CC^{ae}\text{-AG}^{ak}$	[gcaA/gcgT]	2.43	$CC^{ae}\text{-AG}^e$	[gcaC/gcgG]	1.73	$CC^{af}\text{-AG}^{ak}$	[gcaA/tcgT]	2.44		
		$CC^{af}\text{-AG}^e$	[gcaC/tcgG]	1.93	$CC^{ak}\text{-AG}^{ak}$	[tcaA/tcgT]	2.21	$CC^{ak}\text{-AG}^e$	[tcaC/tcgG]	1.77		
		$CC^{an}\text{-AG}^{ak}$	[acaA/ccgT]	1.99	$CC^{an}\text{-AG}^e$	[acaC/ccgG]	2.28	$CC^c\text{-AG}^{ak}$	[acaA/gcgT]	2.13		
		$CC^c\text{-AG}^e$	[acaC/gcgG]	15.1	$CC^f\text{-AG}^{aa}$	[Acaa/Tcgc]	2.01	$CC^f\text{-AG}^{ag}$	[Acaa/Tcgg]	2.19		
		$CC^f\text{-AG}^{ak}$	[AcaA/TcgT]	2.49	$CC^f\text{-AG}^d$	[Acac/Tcgc]	1.91	$CC^f\text{-AG}^e$	[AcaC/Tcgg]	2.40		
		$CC^f\text{-AG}^f$	[Acac/Tcgt]	5.68	$CC^f\text{-AG}^j$	[Acag/Tcgg]	1.95	$CC^f\text{-AG}^k$	[Acag/Tcgt]	1.94		
		$CC^f\text{-AG}^p$	[Acat/Tcgt]	2.06	$CC^f\text{-AG}^t$	[Acaa/Tcga]	2.28	$CC^s\text{-AG}^{ak}$	[ccaA/ccgT]	1.72		
		$CC^s\text{-AG}^e$	[ccaC/ccgG]	2.48	$CC^t\text{-AG}^{aa}$	[Ccaa/Gcgc]	1.73	$CC^t\text{-AG}^{ag}$	[Ccaa/Gcgg]	1.69		
		$CC^t\text{-AG}^{ak}$	[CcaA/GcgT]	1.77	$CC^t\text{-AG}^d$	[Ccac/Gcgc]	2.05	$CC^t\text{-AG}^e$	[CcaC/GcgG]	2.47		
		$CC^t\text{-AG}^f$	[Ccac/Gcgt]	2.51	$CC^t\text{-AG}^j$	[Ccag/Gcgg]	1.77	$CC^t\text{-AG}^k$	[Ccag/Gcgt]	2.23		
		$CC^t\text{-AG}^p$	[Ccat/Gcgt]	1.83	$CC^t\text{-AG}^t$	[Ccaa/Gcga]	1.77	$CC^u\text{-AG}^{ak}$	[ccaA/tcgT]	2.45		
		$CC^u\text{-AG}^e$	[ccaC/tcgG]	1.87	$CC^w\text{-AG}^{ak}$	[acaA/acgT]	2.50	$CC^w\text{-AG}^e$	[acaC/acgG]	2.26		
		Summary for CDNN CC-AG: $k_{\min}=1.69$ $k_{\max}=15.1$ $\langle k \rangle=2.6$ $\sigma(k)=2.2$										
		CC-AT	$0.866 \pm 0.33$	$CC^{ad}\text{-AT}$	[Tca/Aca]	1.05	$CC^{ag}\text{-AT}$	[Tcg/Acg]	0.768	$CC^{ah}\text{-AT}$	[Tcg/Act]	0.866
				$CC^{al}\text{-AT}$	[Tct/Act]	1.27	$CC^{at}\text{-AT}$	[Tca/Acc]	0.630	$CC^f\text{-AT}$	[Tca/Acg]	0.630
				$CC^k\text{-AT}$	[AcA/TcT]	1.45	$CC^v\text{-AT}$	[Tcc/Acc]	0.367	$CC^x\text{-AT}$	[Cca/GcT]	1.13
				$CC^y\text{-AT}$	[Tcc/Act]	0.495						
Summary for CDNN CC-AT: $k_{\min}=0.367$ $k_{\max}=1.45$ $\langle k \rangle=0.87$ $\sigma(k)=0.33$												
CC-CC	$2.39 \pm 0.29$	$CC^{ao}\text{-CC}^{ap}$	[cccC/cccG]	2.45	$CC^{ao}\text{-CC}^v$	[cccA/cccT]	2.64	$CC^{ap}\text{-CC}^{ap}$	[CccC/GccG]	2.47		
		$CC^{ap}\text{-CC}^{aq}$	[Cccc/Gcct]	2.44	$CC^{ap}\text{-CC}^{av}$	[Cccg/Gcgg]	2.04	$CC^{ap}\text{-CC}^{aw}$	[Cccg/Gcct]	2.63		
		$CC^{ap}\text{-CC}^{bb}$	[Ccct/Gcct]	2.19	$CC^{ap}\text{-CC}^l$	[Ccca/Gcca]	2.56	$CC^{ap}\text{-CC}^p$	[Ccca/Gccc]	2.59		
		$CC^{ap}\text{-CC}^s$	[Ccca/Gccg]	1.85	$CC^{ap}\text{-CC}^v$	[CccA/GccT]	2.80	$CC^{ap}\text{-CC}^w$	[cccA/tccT]	2.09		
		$CC^{av}\text{-CC}^v$	[gccA/gccT]	2.01	$CC^{aw}\text{-CC}^v$	[gccA/tccT]	2.75	$CC^{bb}\text{-CC}^v$	[tccA/tccT]	2.68		
		$CC^l\text{-CC}^v$	[accA/accT]	2.53	$CC^p\text{-CC}^v$	[accA/cccT]	1.80	$CC^s\text{-CC}^v$	[accA/gccT]	2.45		
		$CC^v\text{-CC}^v$	[AccA/TccT]	2.48								
		Summary for CDNN CC-CC: $k_{\min}=1.80$ $k_{\max}=2.80$ $\langle k \rangle=2.4$ $\sigma(k)=0.29$										
CC-CG	$0.442 \pm 0.090$	$CC^{ap}\text{-CG}$	[Gcc/Ccc]	0.498	$CC^{ar}\text{-CG}$	[Ccc/Gcg]	0.589	$CC^{as}\text{-CG}$	[Gcc/Cct]	0.335		
		$CC^{ax}\text{-CG}$	[Gcg/Ccg]	0.455	$CC^{ay}\text{-CG}$	[Gcg/Cct]	0.349	$CC^{bc}\text{-CG}$	[Gct/Cct]	0.391		
		$CC^m\text{-CG}$	[Gca/Cca]	0.361	$CC^q\text{-CG}$	[Gca/Ccc]	0.401	$CC^t\text{-CG}$	[Gca/Ccg]	0.442		
		$CC^x\text{-CG}$	[AcC/TcG]	0.600								
Summary for CDNN CC-CG: $k_{\min}=0.335$ $k_{\max}=0.600$ $\langle k \rangle=0.44$ $\sigma(k)=0.090$												
CC-CT	$2.87 \pm 0.36$	$CC^{aq}\text{-CT}^{ak}$	[cccA/cctT]	2.79	$CC^{aq}\text{-CT}^e$	[cccC/cctG]	2.34	$CC^{as}\text{-CT}^{aa}$	[Ccca/Gctc]	2.82		
		$CC^{as}\text{-CT}^{ag}$	[Ccca/Gctg]	2.61	$CC^{as}\text{-CT}^{ak}$	[CccA/GctT]	2.43	$CC^{as}\text{-CT}^d$	[Cccc/Gctc]	3.46		
		$CC^{as}\text{-CT}^e$	[Cccc/GctG]	3.39	$CC^{as}\text{-CT}^f$	[Cccc/Gctt]	3.10	$CC^{as}\text{-CT}^j$	[Cccg/Gctg]	3.03		
		$CC^{as}\text{-CT}^k$	[Cccg/Gctt]	3.27	$CC^{as}\text{-CT}^p$	[Ccct/Gctt]	3.31	$CC^{as}\text{-CT}^t$	[Ccca/Gcta]	2.64		
		$CC^{au}\text{-CT}^{ak}$	[cccA/tctT]	2.53	$CC^{au}\text{-CT}^e$	[cccC/tctG]	2.93	$CC^{az}\text{-CT}^{ak}$	[gccA/gctT]	2.53		

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$			
		$CC^{az}-CT^e$	[gccc/gctG]	2.64	$CC^{ba}-CT^{ak}$	[gcccA/tctT]	2.60	$CC^{ba}-CT^e$	[gccc/tctG]	3.00			
		$CC^b-CT^{ak}$	[tccA/tctT]	2.98	$CC^b-CT^e$	[tccc/tctG]	3.33	$CC^n-CT^{ak}$	[accA/actT]	3.11			
		$CC^n-CT^e$	[accC/actG]	2.92	$CC^r-CT^{ak}$	[accA/cctT]	2.70	$CC^r-CT^e$	[accC/cctG]	2.51			
		$CC^u-CT^{ak}$	[accA/gctT]	2.72	$CC^u-CT^e$	[accC/gctG]	2.49	$CC^y-CT^{aa}$	[Acca/Tctc]	2.83			
		$CC^y-CT^{ag}$	[Acca/Tctg]	3.16	$CC^y-CT^{ak}$	[AccA/TctT]	3.35	$CC^y-CT^d$	[Accc/Tctc]	3.47			
		$CC^y-CT^e$	[AccC/TctG]	3.03	$CC^y-CT^f$	[Accc/Tctt]	3.44	$CC^y-CT^j$	[Accg/Tctg]	2.33			
		$CC^y-CT^k$	[Accg/Tctt]	2.62	$CC^y-CT^p$	[Acct/Tctt]	2.27	$CC^y-CT^t$	[Acca/Tcta]	2.43			
		Summary for CDNN CC-CT: $k_{\min}=2.27$ $k_{\max}=3.47$ $\langle k \rangle=2.9$ $\sigma(k)=0.36$											
CC-GC	$1.24 \pm 0.47$	$CC^{ap}-GC$	[Ccc/Gcc]	1.05	$CC^{ar}-GC$	[Gcg/Ccc]	1.11	$CC^{as}-GC$	[Ccc/Gct]	1.26			
		$CC^{ax}-GC$	[Ccg/Gcg]	1.87	$CC^{ay}-GC$	[Ccg/Gct]	1.90	$CC^{bc}-GC$	[Cct/Gct]	1.48			
		$CC^m-GC$	[Cca/Gca]	0.633	$CC^q-GC$	[Cca/Gcc]	0.995	$CC^t-GC$	[Cca/Gcg]	1.66			
		$CC^x-GC$	[AcG/TcC]	0.445									
		Summary for CDNN CC-GC: $k_{\min}=0.445$ $k_{\max}=1.90$ $\langle k \rangle=1.2$ $\sigma(k)=0.47$											
CC-GG	$8.56 \pm 7.4$	$CC^{ab}-GG^{ap}$	[acgC/cggG]	6.99	$CC^{ab}-GG^v$	[acgA/cggT]	4.87	$CC^{ae}-GG^{ap}$	[acgC/gcgG]	19.8			
		$CC^{ae}-GG^v$	[acgA/gcgT]	9.37	$CC^{ag}-GG^{ao}$	[Acgg/Tcgc]	4.95	$CC^{ag}-GG^{ap}$	[AcgC/TcgG]	8.90			
		$CC^{ag}-GG^{aq}$	[AcgC/Tcgt]	6.16	$CC^{ag}-GG^{av}$	[Acgg/Tcgg]	5.81	$CC^{ag}-GG^{aw}$	[Acgg/Tcgt]	5.18			
		$CC^{ag}-GG^{bb}$	[Acgt/Tcgt]	7.07	$CC^{ag}-GG^l$	[Acga/Tcga]	6.00	$CC^{ag}-GG^p$	[Acga/Tcgc]	7.01			
		$CC^{ag}-GG^s$	[Acga/Tcgg]	6.83	$CC^{ag}-GG^v$	[AcgA/TcgT]	0.293	$CC^{av}-GG^{ap}$	[ccgC/cggG]	7.08			
		$CC^{av}-GG^v$	[ccgA/cggT]	7.02	$CC^{ax}-GG^{ao}$	[CcgC/Gcgc]	7.20	$CC^{ax}-GG^{ap}$	[CcgC/GcgG]	7.00			
		$CC^{ax}-GG^{aq}$	[CcgC/Gcgt]	7.95	$CC^{ax}-GG^{av}$	[Ccgg/Gcgg]	7.01	$CC^{ax}-GG^{aw}$	[Ccgg/Gcgt]	7.09			
		$CC^{ax}-GG^{bb}$	[Ccgt/Gcgt]	7.10	$CC^{ax}-GG^l$	[Ccga/Gcga]	4.83	$CC^{ax}-GG^p$	[Ccga/Gcgc]	10.1			
		$CC^{ax}-GG^s$	[Ccga/Gcgg]	6.83	$CC^{ax}-GG^v$	[CcgA/GcgT]	11.4	$CC^{az}-GG^{ap}$	[ccgC/tcgG]	6.82			
		$CC^{az}-GG^v$	[ccgA/tcgT]	5.52	$CC^d-GG^{ap}$	[gcgC/gcgG]	45.9	$CC^d-GG^v$	[gcgA/gcgT]	5.84			
		$CC^e-GG^{ap}$	[gcgC/tcgG]	23.6	$CC^e-GG^v$	[gcgA/tcgT]	8.83	$CC^h-GG^{ap}$	[tcgC/tcgG]	5.91			
		$CC^h-GG^v$	[tcgA/tcgT]	4.92	$CC^z-GG^{ap}$	[acgC/acgG]	5.45	$CC^z-GG^v$	[acgA/acgT]	5.42			
		Summary for CDNN CC-GG: $k_{\min}=0.293$ $k_{\max}=45.9$ $\langle k \rangle=8.6$ $\sigma(k)=7.4$											
CC-GT	$2.19 \pm 0.26$	$CC^{aa}-GT^{ak}$	[acgA/actT]	2.08	$CC^{aa}-GT^e$	[acgC/actG]	2.17	$CC^{ac}-GT^{ak}$	[acgA/cctT]	2.56			
		$CC^{ac}-GT^e$	[acgC/cctG]	2.09	$CC^{af}-GT^{ak}$	[acgA/gctT]	1.83	$CC^{af}-GT^e$	[acgC/gctG]	1.89			
		$CC^{ah}-GT^{aa}$	[Acga/Tctc]	2.66	$CC^{ah}-GT^{ag}$	[Acga/Tctg]	1.92	$CC^{ah}-GT^{ak}$	[AcgA/tctT]	2.24			
		$CC^{ah}-GT^d$	[AcgC/Tctc]	2.56	$CC^{ah}-GT^e$	[AcgC/TctG]	1.94	$CC^{ah}-GT^f$	[AcgC/tctt]	2.05			
		$CC^{ah}-GT^j$	[Acgg/Tctg]	2.49	$CC^{ah}-GT^k$	[Acgg/Tctt]	2.06	$CC^{ah}-GT^p$	[Acgt/Tctt]	2.45			
		$CC^{ah}-GT^t$	[Acga/Tcta]	2.22	$CC^{aw}-GT^{ak}$	[ccgA/cctT]	2.40	$CC^{aw}-GT^e$	[ccgC/cctG]	2.25			
		$CC^{ay}-GT^{aa}$	[Ccga/Gctc]	2.29	$CC^{ay}-GT^{ag}$	[Ccga/Gctg]	1.92	$CC^{ay}-GT^{ak}$	[CcgA/GctT]	2.59			
		$CC^{ay}-GT^d$	[CcgC/Gctc]	2.29	$CC^{ay}-GT^e$	[CcgC/GctG]	1.81	$CC^{ay}-GT^f$	[CcgC/Gctt]	2.03			
		$CC^{ay}-GT^j$	[Ccgg/Gctg]	2.50	$CC^{ay}-GT^k$	[Ccgg/Gctt]	2.70	$CC^{ay}-GT^p$	[Ccgt/Gctt]	1.91			
		$CC^{ay}-GT^t$	[Ccga/Gcta]	1.97	$CC^{ba}-GT^{ak}$	[ccgA/tctT]	2.19	$CC^{ba}-GT^e$	[ccgC/tctG]	1.93			
		$CC^e-GT^{ak}$	[gcgA/gctT]	2.30	$CC^e-GT^e$	[gcgC/gctG]	1.87	$CC^g-GT^{ak}$	[gcgA/tctT]	1.92			
		$CC^g-GT^e$	[gcgC/tctG]	2.05	$CC^i-GT^{ak}$	[tcgA/tctT]	2.05	$CC^i-GT^e$	[tcgC/tctG]	2.54			
		Summary for CDNN CC-GT: $k_{\min}=1.81$ $k_{\max}=2.70$ $\langle k \rangle=2.2$ $\sigma(k)=0.26$											
CC-TC	$2.11 \pm 0.28$	$CC^{aq}-TC^{ak}$	[cctA/ccct]	2.43	$CC^{aq}-TC^e$	[cctC/cccg]	2.37	$CC^{as}-TC^{aa}$	[Ccta/Gccc]	1.97			
		$CC^{as}-TC^{ag}$	[Ccta/Gccg]	1.89	$CC^{as}-TC^{ak}$	[CctA/Gcct]	1.72	$CC^{as}-TC^d$	[Cctc/Gccc]	1.86			
		$CC^{as}-TC^e$	[CctC/GccG]	1.74	$CC^{as}-TC^f$	[Cctc/Gcct]	1.84	$CC^{as}-TC^j$	[Cctg/Gccg]	1.76			
		$CC^{as}-TC^k$	[Cctg/Gcct]	1.75	$CC^{as}-TC^p$	[Cctt/Gcct]	2.16	$CC^{as}-TC^t$	[Ccta/Gcca]	1.93			
		$CC^{au}-TC^{ak}$	[cctA/tccT]	1.89	$CC^{au}-TC^e$	[cctC/tccG]	2.43	$CC^{az}-TC^{ak}$	[gctA/gccT]	2.04			
		$CC^{az}-TC^e$	[gctC/gccG]	2.32	$CC^{ba}-TC^{ak}$	[gctA/tccT]	2.34	$CC^{ba}-TC^e$	[gctC/tccG]	2.38			
		$CC^b-TC^{ak}$	[tctA/tccT]	1.93	$CC^b-TC^e$	[tctC/tccG]	1.78	$CC^n-TC^{ak}$	[actA/accT]	1.85			
		$CC^n-TC^e$	[actC/accG]	2.07	$CC^r-TC^{ak}$	[actA/ccct]	2.60	$CC^r-TC^e$	[actC/cccg]	2.24			
		$CC^u-TC^{ak}$	[actA/gccT]	2.01	$CC^u-TC^e$	[actC/gccG]	2.15	$CC^y-TC^{aa}$	[Acta/Tccc]	2.55			
		$CC^y-TC^{ag}$	[Acta/Tccg]	2.53	$CC^y-TC^{ak}$	[ActA/TccT]	2.51	$CC^y-TC^d$	[Actc/Tccc]	2.35			
		$CC^y-TC^e$	[ActC/TccG]	1.79	$CC^y-TC^f$	[Actc/Tcct]	1.82	$CC^y-TC^j$	[Actg/Tccg]	2.52			
		$CC^y-TC^k$	[Actg/Tcct]	2.03	$CC^y-TC^p$	[Actt/Tcct]	2.33	$CC^y-TC^t$	[Acta/Tcca]	2.20			
		Summary for CDNN CC-TC: $k_{\min}=1.72$ $k_{\max}=2.60$ $\langle k \rangle=2.1$ $\sigma(k)=0.28$											
CC-TG	$4.94 \pm 5.1$	$CC^{aa}-TG^{ak}$	[actA/acgT]	3.12	$CC^{aa}-TG^e$	[actC/acgG]	2.91	$CC^{ac}-TG^{ak}$	[actA/cggT]	2.97			

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$CC^{ac}\text{-TG}^e$	[actC/ccgG]	3.83	$CC^{af}\text{-TG}^{ak}$	[actA/gcgT]	3.67	$CC^{af}\text{-TG}^e$	[actC/gcgG]	10.2
		$CC^{ah}\text{-TG}^{aa}$	[Acta/Tcgc]	3.60	$CC^{ah}\text{-TG}^{ag}$	[Acta/Tcgg]	3.59	$CC^{ah}\text{-TG}^{ak}$	[ActA/TcgT]	3.77
		$CC^{ah}\text{-TG}^d$	[Actc/Tcgc]	3.49	$CC^{ah}\text{-TG}^e$	[ActC/Tcgg]	3.84	$CC^{ah}\text{-TG}^f$	[Actc/Tcgt]	13.1
		$CC^{ah}\text{-TG}^j$	[Actg/Tcgg]	3.44	$CC^{ah}\text{-TG}^k$	[Actg/Tcgt]	13.2	$CC^{ah}\text{-TG}^p$	[Actt/Tcgt]	31.6
		$CC^{ah}\text{-TG}^t$	[Acta/Tcga]	3.48	$CC^{aw}\text{-TG}^{ak}$	[ccta/ccgT]	3.74	$CC^{aw}\text{-TG}^e$	[cctC/ccgG]	3.29
		$CC^{ay}\text{-TG}^{aa}$	[Ccta/Gcgc]	4.01	$CC^{ay}\text{-TG}^{ag}$	[Ccta/Gcgg]	4.03	$CC^{ay}\text{-TG}^{ak}$	[CctA/GcgT]	3.86
		$CC^{ay}\text{-TG}^d$	[Cctc/Gcgc]	3.65	$CC^{ay}\text{-TG}^e$	[CctC/GcgG]	3.39	$CC^{ay}\text{-TG}^f$	[Cctc/Gcgt]	2.92
		$CC^{ay}\text{-TG}^j$	[Cctg/Gcgg]	3.20	$CC^{ay}\text{-TG}^k$	[Cctg/Gcgt]	2.86	$CC^{ay}\text{-TG}^p$	[Cctt/Gcgt]	3.11
		$CC^{ay}\text{-TG}^t$	[Ccta/Gcga]	3.08	$CC^{ba}\text{-TG}^{ak}$	[cctA/tcgT]	2.92	$CC^{ba}\text{-TG}^e$	[cctC/tcgG]	3.70
		$CC^e\text{-TG}^{ak}$	[gctA/gcgT]	3.82	$CC^e\text{-TG}^e$	[gctC/gcgG]	3.81	$CC^g\text{-TG}^{ak}$	[gctA/tcgT]	3.58
		$CC^g\text{-TG}^e$	[gctC/tcgG]	3.29	$CC^i\text{-TG}^{ak}$	[tctA/tcgT]	2.71	$CC^i\text{-TG}^e$	[tctC/tcgG]	3.18
		Summary for CDNN CC-TG: $k_{\min}=2.71$ $k_{\max}=31.6$ $\langle k \rangle=4.9$ $\sigma(k)=5.1$								
CC-TT	$0.840 \pm 0.096$	$CC^{ai}\text{-TT}^{ap}$	[actC/actG]	0.958	$CC^{ai}\text{-TT}^v$	[actA/actT]	0.692	$CC^{aj}\text{-TT}^{ap}$	[actC/cctG]	0.917
		$CC^{aj}\text{-TT}^v$	[actA/cctT]	0.848	$CC^{ak}\text{-TT}^{ap}$	[actC/gctG]	0.710	$CC^{ak}\text{-TT}^v$	[actA/gctT]	0.768
		$CC^{al}\text{-TT}^{ao}$	[Actc/Tctc]	0.991	$CC^{al}\text{-TT}^{ap}$	[ActC/TctG]	0.992	$CC^{al}\text{-TT}^{aq}$	[Actc/Tctt]	0.842
		$CC^{al}\text{-TT}^{av}$	[Actg/Tctg]	0.774	$CC^{al}\text{-TT}^{aw}$	[Actg/Tctt]	0.933	$CC^{al}\text{-TT}^{bb}$	[Actt/Tctt]	0.966
		$CC^{al}\text{-TT}^l$	[Acta/Tcta]	0.696	$CC^{al}\text{-TT}^p$	[Acta/Tctc]	0.785	$CC^{al}\text{-TT}^s$	[Acta/Tctg]	0.814
		$CC^{al}\text{-TT}^v$	[ActA/TctT]	0.862	$CC^b\text{-TT}^{ap}$	[cctC/tctG]	0.761	$CC^{bb}\text{-TT}^{ap}$	[cctC/cctG]	0.716
		$CC^{bb}\text{-TT}^v$	[ccta/cctT]	0.961	$CC^{bc}\text{-TT}^{ao}$	[Cctc/Gctc]	0.839	$CC^{bc}\text{-TT}^{ap}$	[CctC/GctG]	0.775
		$CC^{bc}\text{-TT}^{aq}$	[Cctc/Gctt]	0.791	$CC^{bc}\text{-TT}^{av}$	[Cctg/Gctg]	0.907	$CC^{bc}\text{-TT}^{aw}$	[Cctg/Gctt]	0.735
		$CC^{bc}\text{-TT}^{bb}$	[Cctt/Gctt]	0.874	$CC^{bc}\text{-TT}^l$	[Ccta/Gcta]	0.700	$CC^{bc}\text{-TT}^p$	[Ccta/Gctc]	1.01
		$CC^{bc}\text{-TT}^s$	[Ccta/Gctg]	0.793	$CC^{bc}\text{-TT}^v$	[Ccta/GctT]	0.920	$CC^b\text{-TT}^v$	[cctA/tctT]	0.751
		$CC^h\text{-TT}^{ap}$	[gctC/gctG]	0.942	$CC^h\text{-TT}^v$	[gctA/gctT]	0.892	$CC^i\text{-TT}^{ap}$	[gctC/tctG]	0.875
		$CC^i\text{-TT}^v$	[gctA/tctT]	0.715	$CC^j\text{-TT}^{ap}$	[tctC/tctG]	0.786	$CC^j\text{-TT}^v$	[tctA/tctT]	0.951
		Summary for CDNN CC-TT: $k_{\min}=0.692$ $k_{\max}=1.01$ $\langle k \rangle=0.84$ $\sigma(k)=0.096$								
CG-AG	$1.03 \pm 0.23$	$CG\text{-AG}^{ad}$	[Caa/Ggc]	1.03	$CG\text{-AG}^{ah}$	[Caa/Ggg]	1.21	$CG\text{-AG}^{al}$	[AgG/TaC]	1.12
		$CG\text{-AG}^e$	[Cac/Ggc]	0.372	$CG\text{-AG}^g$	[CGG/GaC]	1.07	$CG\text{-AG}^h$	[Cac/Ggt]	0.934
		$CG\text{-AG}^l$	[Cag/Ggg]	1.12	$CG\text{-AG}^m$	[Cag/Ggt]	1.04	$CG\text{-AG}^q$	[Cat/Ggt]	1.13
		$CG\text{-AG}^u$	[Caa/Gga]	1.25						
		Summary for CDNN CG-AG: $k_{\min}=0.372$ $k_{\max}=1.25$ $\langle k \rangle=1.0$ $\sigma(k)=0.23$								
CG-CT	$1.15 \pm 0.54$	$CG\text{-CT}^{ad}$	[Cca/Gtc]	1.76	$CG\text{-CT}^{ah}$	[Cca/Gtg]	0.822	$CG\text{-CT}^{al}$	[AtG/TcC]	1.24
		$CG\text{-CT}^e$	[Ccc/Gtc]	1.55	$CG\text{-CT}^g$	[CtG/GcC]	0.445	$CG\text{-CT}^h$	[Ccc/Gtt]	1.80
		$CG\text{-CT}^l$	[Ccg/Gtg]	0.245	$CG\text{-CT}^m$	[Ccg/Gtt]	0.633	$CG\text{-CT}^q$	[Cct/Gtt]	1.58
		$CG\text{-CT}^u$	[Cca/Gta]	1.46						
		Summary for CDNN CG-CT: $k_{\min}=0.245$ $k_{\max}=1.80$ $\langle k \rangle=1.2$ $\sigma(k)=0.54$								
CG-GG	$2.35 \pm 0.41$	$CG\text{-GG}^{ap}$	[Cgc/Ggc]	2.00	$CG\text{-GG}^{ar}$	[GgG/CgC]	2.12	$CG\text{-GG}^{as}$	[Cgc/Ggt]	3.20
		$CG\text{-GG}^{ax}$	[Cgg/Ggg]	2.21	$CG\text{-GG}^{ay}$	[Cgg/Ggt]	2.33	$CG\text{-GG}^{bc}$	[Cgt/Ggt]	2.60
		$CG\text{-GG}^m$	[Cga/Gga]	2.54	$CG\text{-GG}^q$	[Cga/Ggc]	2.44	$CG\text{-GG}^t$	[Cga/Ggg]	2.56
		$CG\text{-GG}^x$	[AgG/TgC]	1.54						
		Summary for CDNN CG-GG: $k_{\min}=1.54$ $k_{\max}=3.20$ $\langle k \rangle=2.4$ $\sigma(k)=0.41$								
CG-GT	$2.52 \pm 1.1$	$CG\text{-GT}^{ad}$	[Cga/Gtc]	3.32	$CG\text{-GT}^{ah}$	[Cga/Gtg]	1.29	$CG\text{-GT}^{al}$	[AtG/TgC]	2.29
		$CG\text{-GT}^e$	[Cgc/Gtc]	2.99	$CG\text{-GT}^g$	[CtG/GgC]	2.93	$CG\text{-GT}^h$	[Cgc/Gtt]	3.59
		$CG\text{-GT}^l$	[Cgg/Gtg]	0.386	$CG\text{-GT}^m$	[Cgg/Gtt]	1.47	$CG\text{-GT}^q$	[Cgt/Gtt]	3.52
		$CG\text{-GT}^u$	[Cga/Gta]	3.41						
		Summary for CDNN CG-GT: $k_{\min}=0.386$ $k_{\max}=3.59$ $\langle k \rangle=2.5$ $\sigma(k)=1.1$								
CG-TC	$1.56 \pm 0.51$	$CG\text{-TC}^{ad}$	[Cta/Gcc]	1.62	$CG\text{-TC}^{ah}$	[Cta/Gcg]	1.25	$CG\text{-TC}^{al}$	[AcG/TtC]	0.915
		$CG\text{-TC}^e$	[Ctc/Gcc]	1.32	$CG\text{-TC}^g$	[Ccg/GtC]	2.75	$CG\text{-TC}^h$	[Ctc/Gct]	1.88
		$CG\text{-TC}^l$	[Ctg/Gcg]	1.60	$CG\text{-TC}^m$	[Ctg/Gct]	1.21	$CG\text{-TC}^q$	[Ctt/Gct]	1.11
		$CG\text{-TC}^u$	[Cta/Gca]	1.98						
		Summary for CDNN CG-TC: $k_{\min}=0.915$ $k_{\max}=2.75$ $\langle k \rangle=1.6$ $\sigma(k)=0.51$								
CG-TG	$3.46 \pm 0.67$	$CG\text{-TG}^{ad}$	[Cta/Ggc]	3.39	$CG\text{-TG}^{ah}$	[Cta/Ggg]	3.61	$CG\text{-TG}^{al}$	[AgG/TtC]	2.20
		$CG\text{-TG}^e$	[Ctc/Ggc]	2.61	$CG\text{-TG}^g$	[CgG/GtC]	4.08	$CG\text{-TG}^h$	[Ctc/Ggt]	2.86
		$CG\text{-TG}^l$	[Ctg/Ggg]	4.50	$CG\text{-TG}^m$	[Ctg/Ggt]	3.88	$CG\text{-TG}^q$	[Ctt/Ggt]	3.74

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		<b>CG-TG<sup>u</sup></b>	[Cta/Gga]	3.70						
		Summary for CDNN CG-TG: $k_{\min}=2.20$ $k_{\max}=4.50$ $\langle k \rangle=3.5$ $\sigma(k)=0.67$								
CG-TT	$1.88 \pm 0.95$	<b>CG-TT<sup>ap</sup></b>	[Ctc/Gtc]	2.28	<b>CG-TT<sup>ar</sup></b>	[GtG/CtC]	2.38	<b>CG-TT<sup>as</sup></b>	[Ctc/Gtt]	2.68
		<b>CG-TT<sup>ax</sup></b>	[Ctg/Gtg]	0.215	<b>CG-TT<sup>ay</sup></b>	[Ctg/Gtt]	0.404	<b>CG-TT<sup>bc</sup></b>	[Ctt/Gtt]	2.51
		<b>CG-TT<sup>m</sup></b>	[Cta/Gta]	2.30	<b>CG-TT<sup>q</sup></b>	[Cta/Gtc]	2.93	<b>CG-TT<sup>t</sup></b>	[Cta/Gtg]	0.770
		<b>CG-TT<sup>x</sup></b>	[AtG/TtC]	2.34						
		Summary for CDNN CG-TT: $k_{\min}=0.215$ $k_{\max}=2.93$ $\langle k \rangle=1.9$ $\sigma(k)=0.95$								
CT-AG	$3.73 \pm 4.3$	<b>CT<sup>ag</sup>-AG<sup>am</sup></b>	[ccaA/ctgT]	1.92	<b>CT<sup>ag</sup>-AG<sup>h</sup></b>	[ccaA/ctgG]	1.54	<b>CT<sup>ah</sup>-AG<sup>ae</sup></b>	[Ccaa/Gtgc]	2.28
		<b>CT<sup>ah</sup>-AG<sup>ai</sup></b>	[Ccaa/Gtgg]	1.69	<b>CT<sup>ah</sup>-AG<sup>am</sup></b>	[Ccaa/GtgT]	1.75	<b>CT<sup>ah</sup>-AG<sup>f</sup></b>	[Ccac/Gtgc]	1.91
		<b>CT<sup>ah</sup>-AG<sup>h</sup></b>	[CcaC/GtgG]	2.22	<b>CT<sup>ah</sup>-AG<sup>i</sup></b>	[Ccac/Gtgt]	2.07	<b>CT<sup>ah</sup>-AG<sup>n</sup></b>	[Ccag/Gtgg]	2.19
		<b>CT<sup>ah</sup>-AG<sup>o</sup></b>	[Ccag/Gtgt]	1.93	<b>CT<sup>ah</sup>-AG<sup>s</sup></b>	[Ccat/Gtgt]	1.70	<b>CT<sup>ah</sup>-AG<sup>w</sup></b>	[Ccaa/Gtga]	2.22
		<b>CT<sup>ai</sup>-AG<sup>am</sup></b>	[ccaA/ttgT]	1.95	<b>CT<sup>ai</sup>-AG<sup>h</sup></b>	[ccaC/ttgG]	1.62	<b>CT<sup>aj</sup>-AG<sup>am</sup></b>	[acaA/atgT]	2.02
		<b>CT<sup>aj</sup>-AG<sup>h</sup></b>	[acaC/atgG]	2.00	<b>CT<sup>as</sup>-AG<sup>am</sup></b>	[gcaA/gtgT]	1.65	<b>CT<sup>as</sup>-AG<sup>h</sup></b>	[gcaC/gtgG]	1.69
		<b>CT<sup>at</sup>-AG<sup>am</sup></b>	[gcaA/ttgT]	1.82	<b>CT<sup>at</sup>-AG<sup>h</sup></b>	[gcaC/ttgG]	1.80	<b>CT<sup>az</sup>-AG<sup>am</sup></b>	[tcaA/ttgT]	2.10
		<b>CT<sup>az</sup>-AG<sup>h</sup></b>	[tcaC/ttgG]	1.87	<b>CT<sup>b</sup>-AG<sup>am</sup></b>	[acaA/gtgT]	19.1	<b>CT<sup>bb</sup>-AG<sup>am</sup></b>	[acaA/ctgT]	1.85
		<b>CT<sup>bb</sup>-AG<sup>h</sup></b>	[acaC/ctgG]	1.91	<b>CT<sup>b</sup>-AG<sup>h</sup></b>	[acaC/gtgG]	15.2	<b>CT<sup>c</sup>-AG<sup>ae</sup></b>	[Acaa/Ttgc]	11.1
		<b>CT<sup>c</sup>-AG<sup>ai</sup></b>	[Acaa/Ttgg]	2.03	<b>CT<sup>c</sup>-AG<sup>am</sup></b>	[Acaa/TtgT]	1.94	<b>CT<sup>c</sup>-AG<sup>f</sup></b>	[Acac/Ttgc]	9.05
		<b>CT<sup>c</sup>-AG<sup>h</sup></b>	[AcaC/TtgG]	2.26	<b>CT<sup>c</sup>-AG<sup>i</sup></b>	[Acac/Ttgt]	12.7	<b>CT<sup>c</sup>-AG<sup>n</sup></b>	[Acag/Ttgc]	1.97
		<b>CT<sup>c</sup>-AG<sup>o</sup></b>	[Acag/Ttgt]	9.04	<b>CT<sup>c</sup>-AG<sup>s</sup></b>	[Acac/Ttgt]	2.09	<b>CT<sup>c</sup>-AG<sup>w</sup></b>	[Acaa/Ttga]	1.99
		Summary for CDNN CT-AG: $k_{\min}=1.54$ $k_{\max}=19.1$ $\langle k \rangle=3.7$ $\sigma(k)=4.3$								
CT-AT	$1.24 \pm 0.79$	<b>CT<sup>ak</sup>-AT</b>	[Ttc/Acc]	0.452	<b>CT<sup>al</sup>-AT</b>	[Cca/GtT]	1.45	<b>CT<sup>am</sup>-AT</b>	[Ttc/Act]	0.881
		<b>CT<sup>aq</sup>-AT</b>	[Tta/Aca]	2.85	<b>CT<sup>au</sup>-AT</b>	[Ttg/Acc]	1.08	<b>CT<sup>av</sup>-AT</b>	[Ttg/Act]	0.236
		<b>CT<sup>ba</sup>-AT</b>	[Ttt/Act]	0.904	<b>CT<sup>bc</sup>-AT</b>	[Tta/Acc]	0.880	<b>CT<sup>c</sup>-AT</b>	[Tta/Act]	1.23
		<b>CT<sup>r</sup>-AT</b>	[AcA/TtT]	2.46						
		Summary for CDNN CT-AT: $k_{\min}=0.236$ $k_{\max}=2.85$ $\langle k \rangle=1.2$ $\sigma(k)=0.79$								
CT-CG	$0.579 \pm 0.25$	<b>CT<sup>ad</sup>-CG</b>	[Gta/Ccc]	0.531	<b>CT<sup>ah</sup>-CG</b>	[Gta/Ccg]	0.564	<b>CT<sup>al</sup>-CG</b>	[AcC/TtG]	1.32
		<b>CT<sup>e</sup>-CG</b>	[Gtc/Ccc]	0.441	<b>CT<sup>g</sup>-CG</b>	[CcC/GtG]	0.380	<b>CT<sup>h</sup>-CG</b>	[Gtc/Cct]	0.578
		<b>CT<sup>l</sup>-CG</b>	[Gtg/Ccg]	0.472	<b>CT<sup>m</sup>-CG</b>	[Gtg/Cct]	0.496	<b>CT<sup>q</sup>-CG</b>	[Gtt/Cct]	0.527
		<b>CT<sup>u</sup>-CG</b>	[Gta/Cca]	0.472						
		Summary for CDNN CT-CG: $k_{\min}=0.380$ $k_{\max}=1.32$ $\langle k \rangle=0.58$ $\sigma(k)=0.25$								
CT-CT	$1.80 \pm 0.21$	<b>CT<sup>ae</sup>-CT<sup>am</sup></b>	[accA/cttT]	1.71	<b>CT<sup>ae</sup>-CT<sup>h</sup></b>	[accC/cttG]	1.67	<b>CT<sup>ai</sup>-CT<sup>am</sup></b>	[accA/gttT]	2.08
		<b>CT<sup>ai</sup>-CT<sup>h</sup></b>	[accC/gttG]	1.91	<b>CT<sup>am</sup>-CT<sup>ae</sup></b>	[Acca/Tttc]	1.75	<b>CT<sup>am</sup>-CT<sup>ai</sup></b>	[Acca/Tttg]	1.75
		<b>CT<sup>am</sup>-CT<sup>am</sup></b>	[AccA/TttT]	2.06	<b>CT<sup>am</sup>-CT<sup>f</sup></b>	[Accc/Tttc]	1.73	<b>CT<sup>am</sup>-CT<sup>h</sup></b>	[AccC/TttG]	1.90
		<b>CT<sup>am</sup>-CT<sup>i</sup></b>	[Accc/Tttt]	1.56	<b>CT<sup>am</sup>-CT<sup>n</sup></b>	[Accg/Tttg]	2.05	<b>CT<sup>am</sup>-CT<sup>o</sup></b>	[AccC/Tttt]	1.82
		<b>CT<sup>am</sup>-CT<sup>s</sup></b>	[Acct/Tttt]	2.08	<b>CT<sup>am</sup>-CT<sup>w</sup></b>	[Acca/Ttta]	1.85	<b>CT<sup>f</sup>-CT<sup>am</sup></b>	[cccA/cttT]	1.62
		<b>CT<sup>f</sup>-CT<sup>h</sup></b>	[cccC/cttG]	1.48	<b>CT<sup>h</sup>-CT<sup>ae</sup></b>	[Ccca/Gttc]	1.80	<b>CT<sup>h</sup>-CT<sup>ai</sup></b>	[Ccca/Gttg]	1.94
		<b>CT<sup>h</sup>-CT<sup>am</sup></b>	[CccA/GttT]	1.46	<b>CT<sup>h</sup>-CT<sup>f</sup></b>	[Cccc/Gttc]	2.10	<b>CT<sup>h</sup>-CT<sup>h</sup></b>	[CccC/GttG]	1.44
		<b>CT<sup>h</sup>-CT<sup>i</sup></b>	[Cccc/Gttt]	1.81	<b>CT<sup>h</sup>-CT<sup>n</sup></b>	[Cccg/Gttg]	1.79	<b>CT<sup>h</sup>-CT<sup>o</sup></b>	[Cccg/Gttt]	1.51
		<b>CT<sup>h</sup>-CT<sup>s</sup></b>	[Ccct/Gttt]	2.02	<b>CT<sup>h</sup>-CT<sup>w</sup></b>	[Ccca/Gtta]	1.53	<b>CT<sup>i</sup>-CT<sup>am</sup></b>	[cccA/tttT]	1.94
		<b>CT<sup>i</sup>-CT<sup>h</sup></b>	[cccC/tttG]	1.50	<b>CT<sup>n</sup>-CT<sup>am</sup></b>	[gccA/gttT]	1.92	<b>CT<sup>n</sup>-CT<sup>h</sup></b>	[gccC/gttG]	1.73
		<b>CT<sup>o</sup>-CT<sup>am</sup></b>	[gccA/tttT]	2.04	<b>CT<sup>o</sup>-CT<sup>h</sup></b>	[gccC/tttG]	1.84	<b>CT<sup>s</sup>-CT<sup>am</sup></b>	[tccA/tttT]	1.91
		<b>CT<sup>s</sup>-CT<sup>h</sup></b>	[tccC/tttG]	1.49	<b>CT<sup>w</sup>-CT<sup>am</sup></b>	[accA/attT]	2.18	<b>CT<sup>w</sup>-CT<sup>h</sup></b>	[accC/attG]	1.88
		Summary for CDNN CT-CT: $k_{\min}=1.44$ $k_{\max}=2.18$ $\langle k \rangle=1.8$ $\sigma(k)=0.21$								
CT-GG	$2.45 \pm 1.0$	<b>CT<sup>ab</sup>-GG<sup>as</sup></b>	[tcgC/ttgG]	2.18	<b>CT<sup>ab</sup>-GG<sup>y</sup></b>	[tcgA/ttgT]	2.39	<b>CT<sup>an</sup>-GG<sup>as</sup></b>	[acgC/atgG]	1.89
		<b>CT<sup>an</sup>-GG<sup>y</sup></b>	[acgA/atgT]	2.31	<b>CT<sup>ap</sup>-GG<sup>as</sup></b>	[acgC/ctgG]	2.14	<b>CT<sup>ap</sup>-GG<sup>y</sup></b>	[acgA/ctgT]	2.07
		<b>CT<sup>as</sup>-GG<sup>as</sup></b>	[acgC/gtgG]	1.94	<b>CT<sup>as</sup>-GG<sup>y</sup></b>	[acgA/gtgT]	2.65	<b>CT<sup>au</sup>-GG<sup>aq</sup></b>	[Acgc/Ttgc]	1.96
		<b>CT<sup>au</sup>-GG<sup>as</sup></b>	[AcgC/TtgG]	2.41	<b>CT<sup>au</sup>-GG<sup>au</sup></b>	[Acgc/Ttgt]	2.54	<b>CT<sup>au</sup>-GG<sup>az</sup></b>	[Acgg/Ttgg]	2.58
		<b>CT<sup>au</sup>-GG<sup>b</sup></b>	[Acgt/Ttgt]	2.55	<b>CT<sup>au</sup>-GG<sup>ba</sup></b>	[Acgg/Ttgt]	2.17	<b>CT<sup>au</sup>-GG<sup>n</sup></b>	[Acga/Ttga]	1.96
		<b>CT<sup>au</sup>-GG<sup>r</sup></b>	[Acga/Ttgc]	2.45	<b>CT<sup>au</sup>-GG<sup>u</sup></b>	[Acga/Ttgg]	2.47	<b>CT<sup>au</sup>-GG<sup>y</sup></b>	[AcgA/TtgT]	2.34
		<b>CT<sup>j</sup>-GG<sup>as</sup></b>	[ccgC/ctgG]	2.71	<b>CT<sup>j</sup>-GG<sup>y</sup></b>	[ccgA/ctgT]	2.12	<b>CT<sup>l</sup>-GG<sup>aq</sup></b>	[CcgC/Gtgc]	2.72
		<b>CT<sup>l</sup>-GG<sup>as</sup></b>	[CcgC/GtgG]	2.21	<b>CT<sup>l</sup>-GG<sup>au</sup></b>	[CcgC/Gtgt]	2.60	<b>CT<sup>l</sup>-GG<sup>az</sup></b>	[Ccgg/Gtgg]	2.39
		<b>CT<sup>l</sup>-GG<sup>b</sup></b>	[Ccgt/Gtgt]	2.38	<b>CT<sup>l</sup>-GG<sup>ba</sup></b>	[Ccgg/Gtgt]	2.45	<b>CT<sup>l</sup>-GG<sup>n</sup></b>	[Ccga/Gtga]	2.40
		<b>CT<sup>l</sup>-GG<sup>r</sup></b>	[Ccga/Gtgc]	1.94	<b>CT<sup>l</sup>-GG<sup>u</sup></b>	[Ccga/Gtgg]	2.03	<b>CT<sup>l</sup>-GG<sup>y</sup></b>	[Ccga/GtgT]	8.49

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$	
CT-GT	$1.87 \pm 1.1$	$CT^n-GG^{as}$	[ccgC/ttgG]	2.47	$CT^n-GG^y$	[ccgA/ttgT]	2.26	$CT^x-GG^{as}$	[gcgC/gtgG]	2.11	
		$CT^x-GG^y$	[gcgA/gtgT]	1.93	$CT^y-GG^{as}$	[gcgC/ttgG]	2.34	$CT^y-GG^y$	[gcgA/ttgT]	1.82	
		Summary for CDNN CT-GG: $k_{\min}=1.82$ $k_{\max}=8.49$ $\langle k \rangle=2.5$ $\sigma(k)=1.0$									
		$CT^{ac}-GT^{am}$	[tcgA/tttT]	1.28	$CT^{ac}-GT^h$	[tcgC/tttG]	1.72	$CT^{ao}-GT^{am}$	[acgA/attT]	1.77	
		$CT^{ao}-GT^h$	[acgC/attG]	1.30	$CT^{ar}-GT^{am}$	[acgA/cttT]	1.84	$CT^{ar}-GT^h$	[acgC/cttG]	1.45	
		$CT^{at}-GT^{am}$	[acgA/gttT]	1.33	$CT^{at}-GT^h$	[acgC/gttG]	1.75	$CT^{av}-GT^{ae}$	[AcgA/Tttc]	1.51	
		$CT^{av}-GT^{ai}$	[AcgA/Tttg]	1.34	$CT^{av}-GT^{am}$	[AcgA/TttT]	1.51	$CT^{av}-GT^f$	[AcgC/Tttc]	1.58	
		$CT^{av}-GT^h$	[AcgC/TttG]	1.67	$CT^{av}-GT^i$	[AcgC/Tttt]	1.67	$CT^{av}-GT^n$	[Acgg/Tttg]	1.67	
		$CT^{av}-GT^o$	[Acgg/Tttt]	1.79	$CT^{av}-GT^s$	[Acgt/Tttt]	1.82	$CT^{av}-GT^w$	[AcgA/Ttta]	1.62	
		$CT^k-GT^{am}$	[ccgA/cttT]	1.43	$CT^k-GT^h$	[ccgC/cttG]	1.71	$CT^m-GT^{ae}$	[CcgA/Gttc]	1.62	
		$CT^m-GT^{ai}$	[CcgA/Gttg]	1.57	$CT^m-GT^{am}$	[CcgA/GttT]	5.89	$CT^m-GT^f$	[CcgC/Gttc]	1.33	
		$CT^m-GT^h$	[CcgC/GttG]	1.60	$CT^m-GT^i$	[CcgC/Gttt]	6.41	$CT^m-GT^n$	[CcgC/Gttg]	1.28	
		$CT^m-GT^o$	[CcgG/Gttt]	1.42	$CT^m-GT^s$	[CcgT/Gttt]	1.41	$CT^m-GT^w$	[CcgA/Gtta]	1.86	
		$CT^o-GT^{am}$	[ccgA/tttT]	1.86	$CT^o-GT^h$	[ccgC/tttG]	1.97	$CT^y-GT^{am}$	[gcgA/gttT]	1.88	
		$CT^y-GT^h$	[gcgC/gttG]	1.91	$CT^z-GT^{am}$	[gcgA/tttT]	1.66	$CT^z-GT^h$	[gcgC/tttG]	1.75	
		Summary for CDNN CT-GT: $k_{\min}=1.28$ $k_{\max}=6.41$ $\langle k \rangle=1.9$ $\sigma(k)=1.1$									
		CT-TC	$1.63 \pm 0.20$	$CT^{ae}-TC^{am}$	[actA/ctcT]	2.03	$CT^{ae}-TC^h$	[actC/ctcG]	1.48	$CT^{ai}-TC^{am}$	[actA/gtcT]
$CT^{ai}-TC^h$	[actC/gtcG]			1.51	$CT^{am}-TC^{am}$	[ActA/Ttct]	1.42	$CT^{am}-TC^f$	[Actc/Ttcc]	1.48	
$CT^{am}-TC^h$	[ActC/TtcG]			1.74	$CT^{am}-TC^i$	[Actc/Ttct]	1.95	$CT^{am}-TC^n$	[Actg/Ttcg]	1.63	
$CT^{am}-TC^o$	[Actg/Ttct]			1.49	$CT^{am}-TC^s$	[Actt/Ttct]	1.94	$CT^{am}-TC^w$	[Acta/Ttca]	1.61	
$CT^f-TC^h$	[cctC/ctcG]			1.55	$CT^h-TC^h$	[CctC/GtcG]	1.84	$CT^h-TC^i$	[Cctc/Gtct]	1.64	
$CT^h-TC^n$	[Cctg/Gtcg]			1.41	$CT^h-TC^o$	[Cctg/Gtct]	1.77	$CT^h-TC^s$	[Cctt/Gtct]	1.34	
$CT^h-TC^w$	[Ccta/Gtca]			1.73							
Summary for CDNN CT-TC: $k_{\min}=1.34$ $k_{\max}=1.95$ $\langle k \rangle=1.6$ $\sigma(k)=0.20$											
CT-TG	$2.45 \pm 2.1$	$CT^{ac}-TG^{am}$	[tctA/ttgT]	2.01	$CT^{ac}-TG^h$	[tctC/ttgG]	2.13	$CT^{ao}-TG^{am}$	[actA/atgT]	2.30	
		$CT^{ao}-TG^h$	[actC/atgG]	1.92	$CT^{ar}-TG^{am}$	[actA/ctgT]	1.81	$CT^{ar}-TG^h$	[actC/ctgG]	2.16	
		$CT^{at}-TG^{am}$	[actA/gtgT]	2.13	$CT^{at}-TG^h$	[actC/gtgG]	1.69	$CT^{av}-TG^{ae}$	[Acta/Ttgc]	11.0	
		$CT^{av}-TG^{ai}$	[Acta/Ttgg]	1.86	$CT^{av}-TG^{am}$	[ActA/TtgT]	2.43	$CT^{av}-TG^f$	[Actc/Ttgc]	1.72	
		$CT^{av}-TG^h$	[ActC/TtgG]	1.63	$CT^{av}-TG^i$	[Actc/Ttgt]	10.8	$CT^{av}-TG^n$	[Actg/Ttgg]	1.77	
		$CT^{av}-TG^o$	[Actg/Ttgt]	1.77	$CT^{av}-TG^s$	[Actt/Ttgt]	1.74	$CT^{av}-TG^w$	[Acta/Ttga]	1.84	
		$CT^k-TG^{am}$	[cctA/ctgT]	1.65	$CT^k-TG^h$	[cctC/ctgG]	2.07	$CT^m-TG^{ae}$	[CctC/Gtgc]	1.78	
		$CT^m-TG^{ai}$	[Ccta/Gtgg]	2.01	$CT^m-TG^{am}$	[CctA/GtgT]	2.25	$CT^m-TG^f$	[Cctc/Gtgc]	2.04	
		$CT^m-TG^h$	[CctC/GtgG]	1.68	$CT^m-TG^i$	[Cctc/Gtgt]	2.24	$CT^m-TG^n$	[Cctg/Gtgg]	2.40	
		$CT^m-TG^o$	[Cctg/Gtgt]	2.26	$CT^m-TG^s$	[Cctt/Gtgt]	1.63	$CT^m-TG^w$	[Ccta/Gtga]	2.34	
		$CT^o-TG^{am}$	[cctA/ttgT]	1.73	$CT^o-TG^h$	[cctC/ttgG]	1.83	$CT^y-TG^{am}$	[gctA/gtgT]	1.78	
		$CT^y-TG^h$	[gctC/gtgG]	2.12	$CT^z-TG^{am}$	[gctA/ttgT]	1.80	$CT^z-TG^h$	[gctC/ttgG]	1.98	
		Summary for CDNN CT-TG: $k_{\min}=1.63$ $k_{\max}=11.0$ $\langle k \rangle=2.5$ $\sigma(k)=2.1$									
		CT-TT	$2.13 \pm 0.26$	$CT^{ab}-TT^{as}$	[gctC/gttG]	2.31	$CT^{ab}-TTY$	[gctA/gttT]	1.80	$CT^{ac}-TT^{as}$	[gctC/tttG]
$CT^{ac}-TTY$	[gctA/tttT]			2.58	$CT^{af}-TT^{as}$	[tctC/tttG]	2.06	$CT^{af}-TTY$	[tctA/tttT]	2.29	
$CT^{aw}-TT^{as}$	[actC/attG]			2.58	$CT^{aw}-TTY$	[actA/attT]	1.77	$CT^{az}-TT^{as}$	[actC/cttG]	2.02	
$CT^{ax}-TTY$	[actA/cttT]			1.98	$CT^{az}-TT^{as}$	[actC/gttG]	1.93	$CT^{az}-TTY$	[actA/gttT]	1.77	
$CT^{ba}-TT^{aq}$	[Actc/Tttc]			1.96	$CT^{ba}-TT^{as}$	[ActC/TttG]	1.90	$CT^{ba}-TT^{au}$	[Actc/Tttt]	2.66	
$CT^{ba}-TT^{az}$	[Actg/Tttg]			2.37	$CT^{ba}-TT^b$	[Actt/Tttt]	1.89	$CT^{ba}-TT^ba$	[Actg/Tttt]	1.92	
$CT^{ba}-TT^n$	[Acta/Ttta]			2.47	$CT^{ba}-TT^r$	[Acta/Tttc]	1.99	$CT^{ba}-TT^u$	[Acta/Tttg]	2.00	
$CT^{ba}-TTY$	[ActA/TttT]			2.09	$CT^p-TT^{as}$	[cctC/cttG]	2.26	$CT^p-TTY$	[cctA/cttT]	2.16	
$CT^q-TT^{aq}$	[Cctc/Gttc]			2.10	$CT^q-TT^{as}$	[CctC/GttG]	1.91	$CT^q-TT^{au}$	[Cctc/Gttt]	2.42	
$CT^q-TT^{az}$	[Cctg/Gttg]			1.99	$CT^q-TT^b$	[Cctt/Gttt]	2.14	$CT^q-TT^{ba}$	[Cctg/Gttt]	1.93	
$CT^q-TT^n$	[Ccta/Gtta]			2.62	$CT^q-TT^r$	[Ccta/Gttc]	2.47	$CT^q-TT^u$	[Ccta/Gttg]	1.87	
$CT^q-TTY$	[CctA/GttT]			2.42	$CT^s-TT^{as}$	[cctC/tttG]	2.20	$CT^s-TTY$	[cctA/tttT]	1.84	
Summary for CDNN CT-TT: $k_{\min}=1.77$ $k_{\max}=2.66$ $\langle k \rangle=2.1$ $\sigma(k)=0.26$											
GA-AG	$21.8 \pm 6.7$			$GA^{ag}-AG^{ah}$	[cgaC/cagG]	15.5	$GA^{ag}-AG^c$	[cgaA/cagT]	14.7	$GA^{ah}-AG^{ah}$	[CgaC/GagG]
		$GA^{ah}-AG^{ai}$	[Cgac/Gagt]	15.7	$GA^{ah}-AG^{aj}$	[Cgaa/Gaga]	13.8	$GA^{ah}-AG^{as}$	[Cgag/Gagg]	32.2	
		$GA^{ah}-AG^{at}$	[Cgag/Gagt]	18.4	$GA^{ah}-AG^{az}$	[Cgat/Gagt]	20.3	$GA^{ah}-AG^b$	[Cgaa/Gagg]	29.5	

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$GA^{ah}-AG^{bb}$	[Cgaa/Gagc]	18.8	$GA^{ah}-AG^c$	[CgaA/GagT]	18.3	$GA^{ai}-AG^c$	[cgaA/tagT]	14.3
		$GA^{aj}-AG^c$	[agaA/aagT]	19.0	$GA^{as}-AG^c$	[ggaA/gagT]	32.7	$GA^{at}-AG^c$	[ggaA/tagT]	28.8
		$GA^{az}-AG^c$	[tgaA/tagT]	23.4	$GA^{bb}-AG^c$	[agaA/cagT]	19.7	$GA^b-AG^c$	[agaA/gagT]	35.2
		$GA^c-AG^c$	[AgaA/TagT]	25.4						
		Summary for	CDNN	GA-AG: $k_{\min}=13.8$ $k_{\max}=35.2$ $\langle k \rangle=22$ $\sigma(k)=6.7$						
GA-AT	$2.27 \pm 0.70$	$GA^{ak}-AT$	[TAc/Agc]	2.84	$GA^{al}-AT$	[CgA/GaT]	1.77	$GA^{am}-AT$	[TAc/Agt]	2.42
		$GA^{aq}-AT$	[Taa/Aga]	3.84	$GA^{au}-AT$	[Tag/Agg]	1.93	$GA^{av}-AT$	[Tag/Agt]	1.57
		$GA^{ba}-AT$	[Tat/Agt]	1.54	$GA^{bc}-AT$	[Taa/Agc]	2.92	$GA^c-AT$	[Taa/Agg]	1.77
		$GA^r-AT$	[AgA/TaT]	2.12						
		Summary for	CDNN	GA-AT: $k_{\min}=1.54$ $k_{\max}=3.84$ $\langle k \rangle=2.3$ $\sigma(k)=0.70$						
GA-CG	$1.09 \pm 0.34$	$GA^{ad}-CG$	[Gaa/Cgc]	0.830	$GA^{ah}-CG$	[Gaa/Cgg]	0.810	$GA^{al}-CG$	[AgC/TaG]	1.50
		$GA^e-CG$	[Gac/Cgc]	0.938	$GA^g-CG$	[CgC/GaG]	1.92	$GA^h-CG$	[Gac/Cgt]	0.949
		$GA^l-CG$	[Gag/Cgg]	0.922	$GA^m-CG$	[Gag/Cgt]	1.09	$GA^q-CG$	[Gat/Cgt]	0.847
		$GA^u-CG$	[Gaa/Cga]	1.04						
		Summary for	CDNN	GA-CG: $k_{\min}=0.810$ $k_{\max}=1.92$ $\langle k \rangle=1.1$ $\sigma(k)=0.34$						
GA-CT	$2.49 \pm 0.73$	$GA^{ae}-CT^{ah}$	[agcC/catG]	1.96	$GA^{ae}-CT^c$	[agcA/catT]	2.41	$GA^{ai}-CT^{ah}$	[agcC/gatG]	2.09
		$GA^{ai}-CT^c$	[agcA/gatT]	2.04	$GA^{am}-CT^{ag}$	[Agcc/Tatc]	2.51	$GA^{am}-CT^{ah}$	[AgcC/TatG]	2.25
		$GA^{am}-CT^{ai}$	[Agcc/Tatt]	2.71	$GA^{am}-CT^{aj}$	[Agca/Tata]	2.75	$GA^{am}-CT^{as}$	[Agcg/Tatg]	2.15
		$GA^{am}-CT^{at}$	[Agcg/Tatt]	2.56	$GA^{am}-CT^{az}$	[Agct/Tatt]	1.85	$GA^{am}-CT^b$	[Agca/Tatg]	4.96
		$GA^{am}-CT^{bb}$	[Agca/Tatc]	5.56	$GA^{am}-CT^c$	[AgcA/TatT]	2.75	$GA^f-CT^{ah}$	[cgcc/catG]	2.48
		$GA^f-CT^c$	[cgca/catT]	2.37	$GA^h-CT^{ag}$	[Cgcc/Gatc]	2.66	$GA^h-CT^{ah}$	[Cgcc/GatG]	2.55
		$GA^h-CT^{ai}$	[Cgcc/Gatt]	2.70	$GA^h-CT^{aj}$	[Cgca/Gata]	1.88	$GA^h-CT^{as}$	[Cgcg/Gatg]	2.24
		$GA^h-CT^{at}$	[Cgcg/Gatt]	1.91	$GA^h-CT^{az}$	[Cgct/Gatt]	2.57	$GA^h-CT^b$	[Cgca/Gatg]	2.36
		$GA^h-CT^{bb}$	[Cgca/Gatc]	2.63	$GA^h-CT^c$	[Cgca/GatT]	2.13	$GA^i-CT^{ah}$	[cgcc/tatG]	2.33
		$GA^i-CT^c$	[cgca/tatT]	2.06	$GA^n-CT^{ah}$	[ggcC/gatG]	2.13	$GA^n-CT^c$	[ggcA/gatT]	2.27
		$GA^o-CT^{ah}$	[ggcC/tatG]	1.96	$GA^o-CT^c$	[ggcA/tatT]	2.68	$GA^s-CT^{ah}$	[tgcC/tatG]	1.88
		$GA^s-CT^c$	[tgcA/tatT]	2.18	$GA^w-CT^{ah}$	[agcC/aatG]	2.77	$GA^w-CT^c$	[agcA/aatT]	2.38
		Summary for	CDNN	GA-CT: $k_{\min}=1.85$ $k_{\max}=5.56$ $\langle k \rangle=2.5$ $\sigma(k)=0.73$						
GA-GG	$5.24 \pm 2.7$	$GA^{ab}-GG^f$	[tggA/tagT]	6.64	$GA^{ab}-GG^t$	[tggC/tagG]	4.84	$GA^{an}-GG^f$	[aggA/aagT]	4.22
		$GA^{an}-GG^t$	[aggC/aagG]	4.08	$GA^{ap}-GG^f$	[aggA/cagT]	4.60	$GA^{ap}-GG^t$	[aggC/cagG]	3.52
		$GA^{as}-GG^f$	[aggA/gagT]	4.04	$GA^{as}-GG^t$	[aggC/gagG]	5.04	$GA^{au}-GG^{ae}$	[Aggg/Tagg]	3.59
		$GA^{au}-GG^{af}$	[Aggg/Tagt]	4.46	$GA^{au}-GG^{ak}$	[Aggt/Tagt]	4.38	$GA^{au}-GG^{an}$	[Agga/Tagc]	8.74
		$GA^{au}-GG^c$	[Agga/Tagg]	10.4	$GA^{au}-GG^f$	[AggA/TagT]	4.38	$GA^{au}-GG^s$	[Aggc/Tagc]	4.86
		$GA^{au}-GG^t$	[AggC/TagG]	4.46	$GA^{au}-GG^u$	[Aggc/Tagt]	4.24	$GA^{au}-GG^w$	[Agga/Taga]	16.6
		$GA^j-GG^f$	[cggA/cagT]	3.85	$GA^j-GG^t$	[cggC/cagG]	4.26	$GA^l-GG^{ae}$	[Cggg/Gagg]	4.92
		$GA^l-GG^{af}$	[Cggg/Gagt]	4.99	$GA^l-GG^{ak}$	[Cggt/Gagt]	4.74	$GA^l-GG^{an}$	[Cgga/Gagc]	8.73
		$GA^l-GG^c$	[Cgga/Gagg]	4.51	$GA^l-GG^f$	[Cgga/GagT]	3.41	$GA^l-GG^s$	[Cggc/Gagc]	3.27
		$GA^l-GG^t$	[CggC/GagG]	3.39	$GA^l-GG^u$	[Cggc/Gagt]	4.76	$GA^l-GG^w$	[Cgga/Gaga]	4.50
		$GA^n-GG^f$	[cggA/tagT]	4.58	$GA^n-GG^t$	[cggC/tagG]	3.38	$GA^x-GG^f$	[gggA/gagT]	3.45
		$GA^x-GG^t$	[gggC/gagG]	4.02	$GA^y-GG^f$	[gggA/tagT]	11.2	$GA^y-GG^t$	[gggC/tagG]	3.44
		Summary for	CDNN	GA-GG: $k_{\min}=3.27$ $k_{\max}=16.6$ $\langle k \rangle=5.2$ $\sigma(k)=2.7$						
GA-GT	$3.53 \pm 1.5$	$GA^{ac}-GT^{ah}$	[tggC/tatG]	3.32	$GA^{ac}-GT^c$	[tggA/tatT]	3.63	$GA^{ao}-GT^{ah}$	[aggC/aatG]	3.13
		$GA^{ao}-GT^c$	[aggA/aatT]	3.64	$GA^{ar}-GT^{ah}$	[aggC/catG]	3.27	$GA^{ar}-GT^c$	[aggA/catT]	3.19
		$GA^{at}-GT^{ah}$	[aggC/gatG]	3.35	$GA^{at}-GT^c$	[aggA/gatT]	2.56	$GA^{av}-GT^{ag}$	[Aggc/Tatc]	2.66
		$GA^{av}-GT^{ah}$	[AggC/TatG]	3.01	$GA^{av}-GT^{ai}$	[Aggc/Tatt]	2.61	$GA^{av}-GT^{aj}$	[Agga/Tata]	3.49
		$GA^{av}-GT^{as}$	[Aggg/Tatg]	2.79	$GA^{av}-GT^{at}$	[Aggg/Tatt]	2.63	$GA^{av}-GT^{az}$	[Aggt/Tatt]	2.70
		$GA^{av}-GT^b$	[Agga/Tatg]	8.08	$GA^{av}-GT^{bb}$	[Agga/Tatc]	3.48	$GA^{av}-GT^c$	[AggA/TatT]	2.98
		$GA^k-GT^{ah}$	[cggC/catG]	3.28	$GA^k-GT^c$	[cggA/catT]	3.40	$GA^m-GT^{ag}$	[Cggc/Gatc]	2.94
		$GA^m-GT^{ah}$	[CggC/GatG]	3.13	$GA^m-GT^{ai}$	[Cggc/Gatt]	3.37	$GA^m-GT^{aj}$	[Cgga/Gata]	2.82
		$GA^m-GT^{as}$	[Cggg/Gatg]	3.19	$GA^m-GT^{at}$	[Cggg/Gatt]	2.73	$GA^m-GT^{az}$	[Cggt/Gatt]	2.87
		$GA^m-GT^b$	[Cgga/Gatg]	8.72	$GA^m-GT^{bb}$	[Cgga/Gatc]	3.52	$GA^m-GT^c$	[Cgga/GatT]	2.56
		$GA^o-GT^{ah}$	[cggC/tatG]	2.56	$GA^o-GT^c$	[cggA/tatT]	8.47	$GA^y-GT^{ah}$	[gggC/gatG]	3.14
		$GA^y-GT^c$	[gggA/gatT]	2.79	$GA^z-GT^{ah}$	[gggC/tatG]	3.54	$GA^z-GT^c$	[gggA/tatT]	3.68

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		Summary for CDNN GA-GT: $k_{\min}=2.56$ $k_{\max}=8.72$ $\langle k \rangle=3.5$ $\sigma(k)=1.5$								
GA-TG	$4.00 \pm 2.7$	$GA^{ac}\text{-TG}^{ah}$	[tgtC/tagG]	3.45	$GA^{ac}\text{-TG}^c$	[tgtA/tagT]	2.50	$GA^{ao}\text{-TG}^{ah}$	[agtC/aagG]	3.28
		$GA^{ao}\text{-TG}^c$	[agtA/aagT]	3.13	$GA^{ar}\text{-TG}^{ah}$	[agtC/cagG]	2.57	$GA^{ar}\text{-TG}^c$	[agtA/cagT]	3.23
		$GA^{at}\text{-TG}^{ah}$	[agtC/gagG]	3.23	$GA^{at}\text{-TG}^c$	[agtA/gagT]	6.15	$GA^{av}\text{-TG}^{ag}$	[Agtc/Tagc]	3.16
		$GA^{av}\text{-TG}^{ah}$	[Agtc/TagG]	2.65	$GA^{av}\text{-TG}^{ai}$	[Agtc/Tagt]	3.34	$GA^{av}\text{-TG}^{aj}$	[Agta/Taga]	3.07
		$GA^{av}\text{-TG}^{as}$	[Agtg/Tagg]	2.91	$GA^{av}\text{-TG}^{at}$	[Agtg/Tagt]	2.77	$GA^{av}\text{-TG}^{az}$	[Agtt/Tagt]	13.5
		$GA^{av}\text{-TG}^b$	[Agta/Tagg]	11.5	$GA^{av}\text{-TG}^{bb}$	[Agta/Tagc]	2.40	$GA^{av}\text{-TG}^c$	[Agta/TagT]	2.91
		$GA^k\text{-TG}^{ah}$	[cgtC/cagG]	3.14	$GA^k\text{-TG}^c$	[cgtA/cagT]	3.11	$GA^m\text{-TG}^{ag}$	[Cgtc/Gagc]	2.91
		$GA^m\text{-TG}^{ah}$	[CgtC/GagG]	2.53	$GA^m\text{-TG}^{ai}$	[Cgtc/Gagt]	2.61	$GA^m\text{-TG}^{aj}$	[Cgta/Gaga]	3.28
		$GA^m\text{-TG}^{as}$	[Cgtg/Gagg]	3.21	$GA^m\text{-TG}^{at}$	[Cgtg/Gagt]	3.25	$GA^m\text{-TG}^{az}$	[Cgtt/Gagt]	2.93
		$GA^m\text{-TG}^b$	[Cgta/Gagg]	11.5	$GA^m\text{-TG}^{bb}$	[Cgta/Gagc]	2.94	$GA^m\text{-TG}^c$	[CgtA/GagT]	3.43
		$GA^o\text{-TG}^{ah}$	[cgtC/tagG]	3.14	$GA^o\text{-TG}^c$	[cgtA/tagT]	3.31	$GA^y\text{-TG}^{ah}$	[ggtC/gagG]	2.45
		$GA^y\text{-TG}^c$	[ggtA/gagT]	2.99	$GA^z\text{-TG}^{ah}$	[ggtC/tagG]	3.11	$GA^z\text{-TG}^c$	[ggtA/tagT]	8.59
		Summary for CDNN GA-TT: $k_{\min}=2.40$ $k_{\max}=13.5$ $\langle k \rangle=4.0$ $\sigma(k)=2.7$								
GA-TT	$3.52 \pm 1.5$	$GA^{ab}\text{-TT}^f$	[ggtA/gatT]	2.64	$GA^{ab}\text{-TT}^t$	[ggtC/gatG]	3.57	$GA^{ac}\text{-TT}^f$	[ggtA/tatT]	6.32
		$GA^{ac}\text{-TT}^t$	[ggtC/tatG]	3.56	$GA^{af}\text{-TT}^f$	[tgtA/tatT]	3.65	$GA^{af}\text{-TT}^t$	[tgtC/tatG]	2.60
		$GA^{aw}\text{-TT}^f$	[agtA/aatT]	2.80	$GA^{aw}\text{-TT}^t$	[agtC/aatG]	3.43	$GA^{ax}\text{-TT}^f$	[agtA/catT]	2.74
		$GA^{ax}\text{-TT}^t$	[agtC/catG]	3.38	$GA^{az}\text{-TT}^f$	[agta/gatT]	3.55	$GA^{az}\text{-TT}^t$	[agtC/gatG]	3.22
		$GA^{ba}\text{-TT}^{ae}$	[Agtg/Tatg]	2.51	$GA^{ba}\text{-TT}^{af}$	[Agtg/Tatt]	2.66	$GA^{ba}\text{-TT}^{ak}$	[Agtt/Tatt]	3.15
		$GA^{ba}\text{-TT}^{an}$	[Agta/Tatc]	3.07	$GA^{ba}\text{-TT}^c$	[Agta/Tatg]	2.60	$GA^{ba}\text{-TT}^f$	[Agta/TatT]	2.58
		$GA^{ba}\text{-TT}^s$	[Agtc/Tatc]	3.15	$GA^{ba}\text{-TT}^t$	[Agtc/TatG]	2.77	$GA^{ba}\text{-TT}^u$	[Agtc/Tatt]	2.98
		$GA^{ba}\text{-TT}^w$	[Agta/Tata]	3.10	$GA^p\text{-TT}^f$	[cgtA/catT]	3.67	$GA^p\text{-TT}^t$	[cgtC/catG]	3.64
		$GA^q\text{-TT}^{ae}$	[Cgtg/Gatg]	3.26	$GA^q\text{-TT}^{af}$	[Cgtg/Gatt]	2.74	$GA^q\text{-TT}^{ak}$	[Cgtt/Gatt]	3.36
		$GA^q\text{-TT}^{an}$	[Cgta/Gatc]	7.12	$GA^q\text{-TT}^c$	[Cgta/Gatg]	3.06	$GA^q\text{-TT}^f$	[CgtA/GatT]	3.45
		$GA^q\text{-TT}^s$	[Cgtc/Gatc]	3.04	$GA^q\text{-TT}^t$	[CgtC/GatG]	3.11	$GA^q\text{-TT}^u$	[Cgtc/Gatt]	2.85
		$GA^q\text{-TT}^w$	[Cgta/Gata]	3.21	$GA^s\text{-TT}^f$	[cgtA/tatT]	10.8	$GA^s\text{-TT}^t$	[cgtC/tatG]	3.31
		Summary for CDNN GA-TT: $k_{\min}=2.51$ $k_{\max}=10.8$ $\langle k \rangle=3.5$ $\sigma(k)=1.5$								
GC-CT	$0.450 \pm 0.11$	$GC\text{-CT}^{ad}$	[Gca/Ctc]	0.346	$GC\text{-CT}^{ah}$	[Gca/Ctg]	0.368	$GC\text{-CT}^{al}$	[AtC/TcG]	0.758
		$GC\text{-CT}^e$	[Gcc/Ctc]	0.452	$GC\text{-CT}^g$	[CtC/GcG]	0.484	$GC\text{-CT}^h$	[Gcc/Ctt]	0.373
		$GC\text{-CT}^l$	[Gcg/Ctg]	0.417	$GC\text{-CT}^m$	[Gcg/Ctt]	0.396	$GC\text{-CT}^q$	[Gct/Ctt]	0.455
		$GC\text{-CT}^u$	[Gca/Cta]	0.447						
		Summary for CDNN GC-CT: $k_{\min}=0.368$ $k_{\max}=0.758$ $\langle k \rangle=0.45$ $\sigma(k)=0.11$								
GC-GG	$2.75 \pm 0.41$	$GC\text{-GG}^{ap}$	[Ggc/Cgc]	3.27	$GC\text{-GG}^{ar}$	[Cgc/GgG]	3.36	$GC\text{-GG}^{as}$	[Ggc/Cgt]	2.40
		$GC\text{-GG}^{ax}$	[Ggg/Cgg]	2.53	$GC\text{-GG}^{ay}$	[Ggg/Cgt]	2.88	$GC\text{-GG}^{bc}$	[Ggt/Cgt]	2.55
		$GC\text{-GG}^m$	[Gga/Cga]	2.28	$GC\text{-GG}^q$	[Gga/Cgc]	2.15	$GC\text{-GG}^t$	[Gga/Cgg]	3.14
		$GC\text{-GG}^x$	[AgC/TgG]	2.97						
		Summary for CDNN GC-GG: $k_{\min}=2.15$ $k_{\max}=3.36$ $\langle k \rangle=2.8$ $\sigma(k)=0.41$								
GC-GT	$2.05 \pm 0.21$	$GC\text{-GT}^{ad}$	[Gga/Ctc]	1.95	$GC\text{-GT}^{ah}$	[Gga/Ctg]	1.90	$GC\text{-GT}^{al}$	[AtC/TgG]	2.42
		$GC\text{-GT}^e$	[Ggc/Ctc]	2.39	$GC\text{-GT}^g$	[CtC/GgG]	2.13	$GC\text{-GT}^h$	[Ggc/Ctt]	2.00
		$GC\text{-GT}^l$	[Ggg/Ctg]	2.19	$GC\text{-GT}^m$	[Ggg/Ctt]	1.88	$GC\text{-GT}^q$	[Ggt/Ctt]	1.89
		$GC\text{-GT}^u$	[Gga/Cta]	1.78						
		Summary for CDNN GC-GT: $k_{\min}=1.78$ $k_{\max}=2.42$ $\langle k \rangle=2.1$ $\sigma(k)=0.21$								
GC-TG	$2.56 \pm 0.59$	$GC\text{-TG}^{ad}$	[Gta/Cgc]	2.14	$GC\text{-TG}^{ah}$	[Gta/Cgg]	2.13	$GC\text{-TG}^{al}$	[AgC/TtG]	2.33
		$GC\text{-TG}^e$	[Gtc/Cgc]	2.66	$GC\text{-TG}^g$	[Cgc/GtG]	1.88	$GC\text{-TG}^h$	[Gtc/Cgt]	2.23
		$GC\text{-TG}^l$	[Gtg/Cgg]	2.81	$GC\text{-TG}^m$	[Gtg/Cgt]	4.10	$GC\text{-TG}^q$	[Gtt/Cgt]	2.81
		$GC\text{-TG}^u$	[Gta/Cga]	2.54						
		Summary for CDNN GC-TG: $k_{\min}=1.88$ $k_{\max}=4.10$ $\langle k \rangle=2.6$ $\sigma(k)=0.59$								
GC-TT	$0.751 \pm 0.26$	$GC\text{-TT}^{ap}$	[Gtc/Ctc]	0.818	$GC\text{-TT}^{ar}$	[CtC/GtG]	0.0710	$GC\text{-TT}^{as}$	[Gtc/Ctt]	0.783
		$GC\text{-TT}^{ax}$	[Gtg/Ctg]	0.724	$GC\text{-TT}^{ay}$	[Gtg/Ctt]	0.693	$GC\text{-TT}^{bc}$	[Gtt/Ctt]	0.818
		$GC\text{-TT}^m$	[Gta/Cta]	0.859	$GC\text{-TT}^q$	[Gta/Ctc]	0.728	$GC\text{-TT}^t$	[Gta/Ctg]	0.839
		$GC\text{-TT}^x$	[AtC/TtG]	1.17						
		Summary for CDNN GC-TT: $k_{\min}=0.0710$ $k_{\max}=1.17$ $\langle k \rangle=0.75$ $\sigma(k)=0.26$								
GG-AT	$2.85 \pm 0.52$	$GG^{ad}\text{-AT}$	[Tga/Aga]	2.68	$GG^{ag}\text{-AT}$	[Tgg/Agg]	2.81	$GG^{ah}\text{-AT}$	[Tgg/Agt]	2.54

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(S3 continued)

CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$GG^{al}$ -AT	[Tgt/AgT]	3.63	$GG^{at}$ -AT	[Tga/Agc]	3.85	$GG^f$ -AT	[Tga/Agg]	2.53
		$GG^k$ -AT	[AgA/TgT]	2.37	$GG^v$ -AT	[Tgc/Agc]	3.30	$GG^x$ -AT	[CgA/GgT]	2.28
		$GG^y$ -AT	[Tgc/AgT]	2.51						
		Summary for CDNN GG-AT: $k_{\min}=2.28$ $k_{\max}=3.85$ $\langle k \rangle=2.9$ $\sigma(k)=0.52$								
GG-CT	$2.76 \pm 0.39$	$GG^{aq}$ -CT <sup>au</sup>	[cgcA/cgtT]	2.82	$GG^{aq}$ -CT <sup>l</sup>	[cgcC/cgtG]	2.44	$GG^{as}$ -CT <sup>ab</sup>	[Cgct/GgTt]	2.93
		$GG^{as}$ -CT <sup>an</sup>	[Cgca/Ggta]	2.27	$GG^{as}$ -CT <sup>ap</sup>	[Cgca/Ggtc]	2.98	$GG^{as}$ -CT <sup>as</sup>	[Cgca/Ggtg]	2.74
		$GG^{as}$ -CT <sup>au</sup>	[Cgca/GgtT]	2.74	$GG^{as}$ -CT <sup>j</sup>	[Cgcc/Ggtc]	2.66	$GG^{as}$ -CT <sup>l</sup>	[Cgcc/GgtG]	3.17
		$GG^{as}$ -CT <sup>n</sup>	[Cgcc/Ggtt]	2.22	$GG^{as}$ -CT <sup>x</sup>	[Cgcg/Ggtg]	2.43	$GG^{as}$ -CT <sup>y</sup>	[Cgcg/Ggtt]	2.86
		$GG^{au}$ -CT <sup>au</sup>	[cgcA/tgtT]	3.14	$GG^{au}$ -CT <sup>l</sup>	[cgcC/tgtG]	4.25	$GG^{az}$ -CT <sup>au</sup>	[ggcA/ggtT]	2.42
		$GG^{az}$ -CT <sup>l</sup>	[ggcC/ggtG]	3.15	$GG^{ba}$ -CT <sup>au</sup>	[ggcA/tgtT]	2.72	$GG^{ba}$ -CT <sup>l</sup>	[ggcC/tgtG]	2.96
		$GG^b$ -CT <sup>au</sup>	[tgcA/tgtT]	2.57	$GG^b$ -CT <sup>l</sup>	[tgcC/tgtG]	2.33	$GG^n$ -CT <sup>au</sup>	[agcA/agtT]	2.73
		$GG^n$ -CT <sup>l</sup>	[agcC/agtG]	2.71	$GG^r$ -CT <sup>au</sup>	[agcA/cgtT]	3.06	$GG^r$ -CT <sup>l</sup>	[agcC/cgtG]	3.00
		$GG^u$ -CT <sup>au</sup>	[agcA/ggtT]	3.07	$GG^u$ -CT <sup>l</sup>	[agcC/ggtG]	2.25	$GG^y$ -CT <sup>ab</sup>	[Agct/Tgtt]	2.25
		$GG^y$ -CT <sup>an</sup>	[Agca/Tgta]	2.45	$GG^y$ -CT <sup>ap</sup>	[Agca/Tgtc]	2.65	$GG^y$ -CT <sup>as</sup>	[Agca/Tgtg]	2.81
		$GG^y$ -CT <sup>au</sup>	[AgcA/TgtT]	2.28	$GG^y$ -CT <sup>j</sup>	[Agcc/Tgtc]	2.38	$GG^y$ -CT <sup>l</sup>	[AgcC/TgtG]	3.23
		$GG^y$ -CT <sup>n</sup>	[Agcc/Tgtt]	3.16	$GG^y$ -CT <sup>x</sup>	[Agcg/Tgtg]	2.93	$GG^y$ -CT <sup>y</sup>	[Agcg/Tgtt]	2.67
		Summary for CDNN GG-CT: $k_{\min}=2.22$ $k_{\max}=4.25$ $\langle k \rangle=2.8$ $\sigma(k)=0.39$								
GG-GG	$1.57 \pm 0.19$	$GG^{ab}$ -GG <sup>ag</sup>	[aggA/cggT]	1.49	$GG^{ab}$ -GG <sup>ax</sup>	[aggC/cggG]	1.56	$GG^{ae}$ -GG <sup>ag</sup>	[aggA/gggT]	1.53
		$GG^{ae}$ -GG <sup>ax</sup>	[aggC/gggG]	1.47	$GG^{ag}$ -GG <sup>ag</sup>	[Agga/TggT]	1.95	$GG^{ag}$ -GG <sup>av</sup>	[Aggc/Tggc]	1.42
		$GG^{ag}$ -GG <sup>ax</sup>	[AggC/TggG]	1.77	$GG^{ag}$ -GG <sup>az</sup>	[Aggc/Tggt]	1.48	$GG^{ag}$ -GG <sup>d</sup>	[Aggg/Tggg]	1.70
		$GG^{ag}$ -GG <sup>e</sup>	[Aggg/Tggt]	1.32	$GG^{ag}$ -GG <sup>h</sup>	[Aggt/Tggt]	1.34	$GG^{ag}$ -GG <sup>z</sup>	[Agga/TggA]	1.51
		$GG^{av}$ -GG <sup>ax</sup>	[cggC/cggG]	1.62	$GG^{ax}$ -GG <sup>ax</sup>	[CggC/GggG]	1.36	$GG^{ax}$ -GG <sup>az</sup>	[CggC/Gggt]	1.43
		$GG^{ax}$ -GG <sup>d</sup>	[Cggg/Gggg]	1.91	$GG^{ax}$ -GG <sup>e</sup>	[Cggg/Gggt]	1.63	$GG^{ax}$ -GG <sup>h</sup>	[Cggg/Gggt]	1.87
		$GG^{ax}$ -GG <sup>z</sup>	[Cgga/Ggga]	1.43						
		Summary for CDNN GG-GG: $k_{\min}=1.32$ $k_{\max}=1.95$ $\langle k \rangle=1.6$ $\sigma(k)=0.19$								
GG-GT	$1.60 \pm 0.17$	$GG^{aa}$ -GT <sup>au</sup>	[aggA/agtT]	1.79	$GG^{aa}$ -GT <sup>l</sup>	[aggC/agtG]	1.63	$GG^{ac}$ -GT <sup>au</sup>	[aggA/cgtT]	1.61
		$GG^{ac}$ -GT <sup>l</sup>	[aggC/cgtG]	1.54	$GG^{af}$ -GT <sup>au</sup>	[aggA/ggtT]	1.47	$GG^{af}$ -GT <sup>l</sup>	[aggC/ggtG]	1.65
		$GG^{ah}$ -GT <sup>ab</sup>	[Aggt/Tggt]	1.59	$GG^{ah}$ -GT <sup>an</sup>	[Agga/Tgta]	1.66	$GG^{ah}$ -GT <sup>ap</sup>	[Agga/Tgtc]	1.27
		$GG^{ah}$ -GT <sup>as</sup>	[Agga/Tgtg]	1.80	$GG^{ah}$ -GT <sup>au</sup>	[Agga/TgtT]	1.86	$GG^{ah}$ -GT <sup>j</sup>	[Aggc/Tgtc]	1.60
		$GG^{ah}$ -GT <sup>l</sup>	[AggC/TgtG]	1.42	$GG^{ah}$ -GT <sup>n</sup>	[Aggc/Tggt]	1.54	$GG^{ah}$ -GT <sup>x</sup>	[Aggg/Tgtg]	1.45
		$GG^{ah}$ -GT <sup>y</sup>	[Aggg/Tggt]	1.58	$GG^{aw}$ -GT <sup>au</sup>	[cggA/cgtT]	1.93	$GG^{aw}$ -GT <sup>l</sup>	[cggC/cgtG]	1.60
		$GG^{ay}$ -GT <sup>ab</sup>	[Cggt/Ggtt]	1.43	$GG^{ay}$ -GT <sup>an</sup>	[Cgga/Ggta]	1.33	$GG^{ay}$ -GT <sup>ap</sup>	[Cgga/Ggtc]	1.32
		$GG^{ay}$ -GT <sup>as</sup>	[Cgga/Ggtg]	1.96	$GG^{ay}$ -GT <sup>au</sup>	[Cgga/GgtT]	1.62	$GG^{ay}$ -GT <sup>j</sup>	[CggC/ggtc]	1.63
		$GG^{ay}$ -GT <sup>l</sup>	[CggC/GgtG]	1.61	$GG^{ay}$ -GT <sup>n</sup>	[Cggc/Ggtt]	1.58	$GG^{ay}$ -GT <sup>x</sup>	[CggC/ggtg]	1.75
		$GG^{ay}$ -GT <sup>y</sup>	[Cggg/Ggtt]	1.88	$GG^{ba}$ -GT <sup>au</sup>	[cggA/tgtT]	1.53	$GG^{ba}$ -GT <sup>l</sup>	[cggC/tgtG]	1.66
		$GG^e$ -GT <sup>au</sup>	[gggA/ggtT]	1.53	$GG^e$ -GT <sup>l</sup>	[gggC/ggtG]	1.34	$GG^g$ -GT <sup>au</sup>	[gggA/tgtT]	1.52
		$GG^g$ -GT <sup>l</sup>	[gggC/tgtG]	1.55	$GG^i$ -GT <sup>au</sup>	[tggA/tgtT]	1.64	$GG^i$ -GT <sup>l</sup>	[tggC/tgtG]	1.82
		Summary for CDNN GG-GT: $k_{\min}=1.27$ $k_{\max}=1.96$ $\langle k \rangle=1.6$ $\sigma(k)=0.17$								
GG-TG	$5.13 \pm 3.8$	$GG^{aa}$ -TG <sup>au</sup>	[agtA/aggT]	3.86	$GG^{aa}$ -TG <sup>l</sup>	[agtC/aggG]	3.20	$GG^{ac}$ -TG <sup>au</sup>	[agtA/cggT]	3.78
		$GG^{ac}$ -TG <sup>l</sup>	[agtC/cggG]	4.19	$GG^{af}$ -TG <sup>au</sup>	[agtA/gggT]	3.87	$GG^{af}$ -TG <sup>l</sup>	[agtC/gggG]	3.65
		$GG^{ah}$ -TG <sup>ab</sup>	[Agtt/Tggt]	19.2	$GG^{ah}$ -TG <sup>an</sup>	[Agta/Tgga]	3.51	$GG^{ah}$ -TG <sup>ap</sup>	[Agta/Tggc]	4.17
		$GG^{ah}$ -TG <sup>as</sup>	[Agta/Tggg]	3.40	$GG^{ah}$ -TG <sup>au</sup>	[Agta/TggT]	7.55	$GG^{ah}$ -TG <sup>j</sup>	[Agtc/Tggc]	2.96
		$GG^{ah}$ -TG <sup>l</sup>	[AgcT/TggG]	16.5	$GG^{ah}$ -TG <sup>n</sup>	[Agtc/Tggt]	3.04	$GG^{ah}$ -TG <sup>x</sup>	[Agtg/Tggg]	3.82
		$GG^{ah}$ -TG <sup>y</sup>	[Agtg/Tggt]	11.0	$GG^{aw}$ -TG <sup>au</sup>	[cgtA/cggT]	3.15	$GG^{aw}$ -TG <sup>l</sup>	[cgtC/cggG]	3.86
		$GG^{ay}$ -TG <sup>ab</sup>	[Cgtt/Gggt]	2.97	$GG^{ay}$ -TG <sup>an</sup>	[Cgta/Ggga]	4.20	$GG^{ay}$ -TG <sup>ap</sup>	[Cgta/Gggc]	4.19
		$GG^{ay}$ -TG <sup>as</sup>	[Cgta/Gggg]	3.88	$GG^{ay}$ -TG <sup>au</sup>	[CgtA/GggT]	4.28	$GG^{ay}$ -TG <sup>j</sup>	[Cgtc/Gggc]	3.47
		$GG^{ay}$ -TG <sup>l</sup>	[CgtC/GggG]	13.9	$GG^{ay}$ -TG <sup>n</sup>	[Cgtc/Gggt]	3.50	$GG^{ay}$ -TG <sup>x</sup>	[Cgtg/Gggg]	3.08
		$GG^{ay}$ -TG <sup>y</sup>	[Cgtg/Gggt]	3.34	$GG^{ba}$ -TG <sup>au</sup>	[cgtA/tggT]	4.07	$GG^{ba}$ -TG <sup>l</sup>	[cgtC/tggG]	3.39
		$GG^e$ -TG <sup>au</sup>	[ggtA/gggT]	3.64	$GG^e$ -TG <sup>l</sup>	[ggtC/gggG]	3.96	$GG^g$ -TG <sup>au</sup>	[ggtA/tggT]	3.38
		$GG^g$ -TG <sup>l</sup>	[ggtC/tggG]	6.81	$GG^i$ -TG <sup>au</sup>	[tgtA/tggT]	4.10	$GG^i$ -TG <sup>l</sup>	[tgtc/tggG]	3.83
		Summary for CDNN GG-TG: $k_{\min}=2.96$ $k_{\max}=19.2$ $\langle k \rangle=5.1$ $\sigma(k)=3.8$								
GG-TT	$1.45 \pm 0.15$	$GG^{ai}$ -TT <sup>ag</sup>	[agtA/agtT]	1.44	$GG^{ai}$ -TT <sup>ax</sup>	[agtC/agtG]	1.54	$GG^{aj}$ -TT <sup>ag</sup>	[agtA/cgtT]	1.57

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$GG^{aj}-TT^{ax}$	[agtC/cgtG]	1.32	$GG^{ak}-TT^{ag}$	[agtA/ggtT]	1.61	$GG^{ak}-TT^{ax}$	[agtC/ggtG]	1.49
		$GG^{al}-TT^{ab}$	[Agta/Tgtc]	1.19	$GG^{al}-TT^{ae}$	[Agta/Tgtg]	1.54	$GG^{al}-TT^{ag}$	[Agta/TgtT]	1.46
		$GG^{al}-TT^{av}$	[Agtc/Tgtc]	1.61	$GG^{al}-TT^{ax}$	[AgtC/TgtG]	1.41	$GG^{al}-TT^{az}$	[Agtc/Tgtt]	1.19
		$GG^{al}-TT^d$	[Agtg/Tgtg]	1.26	$GG^{al}-TT^e$	[Agtg/Tgtt]	1.68	$GG^{al}-TT^h$	[Agtt/Tgtt]	1.39
		$GG^{al}-TT^z$	[Agta/Tgta]	1.51	$GG^b-TT^{ag}$	[cgtA/tgtT]	1.34	$GG^b-TT^{ax}$	[cgtC/tgtG]	1.63
		$GG^{bb}-TT^{ag}$	[cgtA/cgtT]	1.34	$GG^{bb}-TT^{ax}$	[cgtC/cgtG]	1.55	$GG^{bc}-TT^{ab}$	[Cgta/Ggtc]	1.16
		$GG^{bc}-TT^{ae}$	[Cgta/Ggtg]	1.47	$GG^{bc}-TT^{ag}$	[CgtA/GgtT]	1.46	$GG^{bc}-TT^{av}$	[Cgtc/Ggtc]	1.61
		$GG^{bc}-TT^{ax}$	[CgtC/GgtG]	1.45	$GG^{bc}-TT^{az}$	[Cgtc/Ggtt]	1.25	$GG^{bc}-TT^d$	[Cgtg/Ggtg]	1.56
		$GG^{bc}-TT^e$	[Cgtg/Ggtt]	1.66	$GG^{bc}-TT^h$	[Cgtt/Ggtt]	1.57	$GG^{bc}-TT^z$	[Cgta/Ggta]	1.24
		$GG^h-TT^{ag}$	[ggtA/ggtT]	1.15	$GG^h-TT^{ax}$	[ggtC/ggtG]	1.64	$GG^i-TT^{ag}$	[ggtA/tgtT]	1.33
		$GG^i-TT^{ax}$	[ggtC/tgtG]	1.32	$GG^j-TT^{ag}$	[tgtA/tgtT]	1.61	$GG^j-TT^{ax}$	[tgtC/tgtG]	1.53
		Summary for CDNN GG-TT: $k_{\min}=1.15$ $k_{\max}=1.68$ $\langle k \rangle=1.4$ $\sigma(k)=0.15$								
GT-AT	$5.23 \pm 0.55$	$GT^a-AT$	[Ttc/Agc]	5.68	$GT^al-AT$	[CgA/GtT]	5.64	$GT^am-AT$	[Ttc/AgT]	4.13
		$GT^{aq}-AT$	[Tta/AgA]	5.83	$GT^{au}-AT$	[Ttg/Agg]	5.35	$GT^{av}-AT$	[Ttg/AgT]	5.29
		$GT^{ba}-AT$	[Ttt/AgT]	5.52	$GT^{bc}-AT$	[Tta/Agc]	4.78	$GT^c-AT$	[Tta/Agg]	4.45
		$GT^r-AT$	[AgA/TtT]	5.68						
		Summary for CDNN GT-AT: $k_{\min}=4.13$ $k_{\max}=5.83$ $\langle k \rangle=5.2$ $\sigma(k)=0.55$								
GT-CT	$1.90 \pm 0.23$	$GT^{ae}-CT^{av}$	[agcA/cttT]	1.97	$GT^{ae}-CT^m$	[agcC/cttG]	1.70	$GT^{ai}-CT^{av}$	[agcA/gttT]	2.28
		$GT^{ai}-CT^m$	[agcC/gttG]	2.03	$GT^{am}-CT^{ac}$	[Agct/Tttt]	1.55	$GT^{am}-CT^{ao}$	[Agca/Ttta]	1.66
		$GT^{am}-CT^{ar}$	[Agca/Tttc]	2.00	$GT^{am}-CT^{at}$	[Agca/Tttg]	2.31	$GT^{am}-CT^{av}$	[Agca/TttT]	1.61
		$GT^{am}-CT^k$	[Agcc/Tttc]	2.11	$GT^{am}-CT^m$	[AgcC/TttG]	2.16	$GT^{am}-CT^o$	[Agcc/Tttt]	2.20
		$GT^{am}-CT^y$	[Agcg/Tttg]	1.88	$GT^{am}-CT^z$	[Agcg/Tttt]	2.26	$GT^f-CT^{av}$	[cgca/cttT]	1.52
		$GT^f-CT^m$	[cgcC/cttG]	1.84	$GT^h-CT^{ac}$	[Cgct/Gttt]	1.98	$GT^h-CT^{ao}$	[Cgca/Gtta]	1.84
		$GT^h-CT^{ar}$	[Cgca/Gttc]	1.57	$GT^h-CT^{at}$	[Cgca/Gttg]	1.97	$GT^h-CT^{av}$	[Cgca/GttT]	1.65
		$GT^h-CT^k$	[Cgcc/Gttc]	2.07	$GT^h-CT^m$	[CgcC/GttG]	2.06	$GT^h-CT^o$	[Cgcc/Gttt]	1.89
		$GT^h-CT^y$	[Cgcg/Gttg]	1.75	$GT^h-CT^z$	[Cgcg/Gttt]	2.21	$GT^i-CT^{av}$	[cgca/tttT]	1.98
		$GT^i-CT^m$	[cgcC/tttG]	1.69	$GT^n-CT^{av}$	[ggcA/gttT]	1.95	$GT^n-CT^m$	[ggcC/gttG]	1.60
		$GT^o-CT^{av}$	[ggcA/tttT]	1.53	$GT^o-CT^m$	[ggcC/tttG]	1.82	$GT^s-CT^{av}$	[tgca/tttT]	2.01
		$GT^s-CT^m$	[tgcC/tttG]	2.11	$GT^w-CT^{av}$	[agcA/attT]	1.63	$GT^w-CT^m$	[agcC/attG]	1.92
		Summary for CDNN GT-CT: $k_{\min}=1.52$ $k_{\max}=2.31$ $\langle k \rangle=1.9$ $\sigma(k)=0.23$								
GT-GT	$4.94 \pm 4.2$	$GT^{ac}-GT^{av}$	[tggA/tttT]	3.68	$GT^{ac}-GT^m$	[tggC/tttG]	3.71	$GT^{ao}-GT^{av}$	[aggA/attT]	2.79
		$GT^{ao}-GT^m$	[aggC/attG]	3.95	$GT^{ar}-GT^{av}$	[aggA/cttT]	3.49	$GT^{ar}-GT^m$	[aggC/cttG]	3.91
		$GT^{at}-GT^{av}$	[aggA/gttT]	3.83	$GT^{at}-GT^m$	[aggC/gttG]	3.84	$GT^{av}-GT^{ac}$	[Aggt/Tttt]	3.60
		$GT^{av}-GT^{ao}$	[Agga/Ttta]	2.92	$GT^{av}-GT^{ar}$	[Agga/Tttc]	3.59	$GT^{av}-GT^{at}$	[Agga/Tttg]	3.38
		$GT^{av}-GT^{av}$	[AggA/TttT]	2.78	$GT^{av}-GT^k$	[Aggc/Tttc]	3.00	$GT^{av}-GT^m$	[AggC/TttG]	3.22
		$GT^{av}-GT^o$	[Aggc/Tttt]	3.87	$GT^{av}-GT^y$	[Aggg/Tttg]	2.87	$GT^{av}-GT^z$	[Aggg/Tttt]	3.60
		$GT^k-GT^{av}$	[cggA/cttT]	3.50	$GT^k-GT^m$	[cggC/cttG]	3.24	$GT^m-GT^{ac}$	[Cggt/Gttt]	2.66
		$GT^m-GT^{ao}$	[Cgga/Gtta]	3.38	$GT^m-GT^{ar}$	[Cgga/Gttc]	14.4	$GT^m-GT^{at}$	[Cgga/Gttg]	2.87
		$GT^m-GT^{av}$	[CggA/GttT]	16.0	$GT^m-GT^k$	[Cggc/Gttc]	2.83	$GT^m-GT^m$	[CggC/GttG]	8.43
		$GT^m-GT^o$	[Cggc/Gttt]	18.0	$GT^m-GT^y$	[Cggg/Gttg]	3.20	$GT^m-GT^z$	[Cggg/Gttt]	16.9
		$GT^o-GT^{av}$	[cggA/tttT]	2.74	$GT^o-GT^m$	[cggC/tttG]	3.81	$GT^y-GT^{av}$	[gggA/gttT]	3.50
		$GT^y-GT^m$	[gggC/gttG]	3.29	$GT^z-GT^{av}$	[gggA/tttT]	3.68	$GT^z-GT^m$	[gggC/tttG]	3.21
		Summary for CDNN GT-GT: $k_{\min}=2.66$ $k_{\max}=18.0$ $\langle k \rangle=4.9$ $\sigma(k)=4.2$								
GT-TG	$1.97 \pm 0.24$	$GT^{ac}-TG^{av}$	[tgtA/ttgT]	2.16	$GT^{ac}-TG^m$	[tgtC/ttgG]	1.67	$GT^{ao}-TG^{av}$	[agtA/atgT]	1.98
		$GT^{ao}-TG^m$	[agtC/atgG]	1.95	$GT^{ar}-TG^{av}$	[agtA/ctgT]	2.28	$GT^{ar}-TG^m$	[agtC/ctgG]	1.90
		$GT^{at}-TG^{av}$	[agtA/gtgT]	2.20	$GT^{at}-TG^m$	[agtC/gtgG]	1.59	$GT^{av}-TG^{av}$	[Agta/TgtT]	2.40
		$GT^{av}-TG^k$	[Agtc/Tgtc]	2.15	$GT^{av}-TG^m$	[AgtC/TgtG]	1.69	$GT^{av}-TG^o$	[Agtc/Tgtt]	1.87
		$GT^{av}-TG^y$	[Agtg/Tgtg]	1.81	$GT^{av}-TG^z$	[Agtg/Tgtt]	2.06	$GT^k-TG^m$	[cgtC/ctgG]	2.36
		$GT^m-TG^m$	[CgtC/GtgG]	1.90	$GT^m-TG^o$	[Cgtc/Gtgt]	1.62	$GT^m-TG^y$	[Cgtg/Gtgg]	1.92
		$GT^m-TG^z$	[Cgtg/Gtgt]	1.90						
		Summary for CDNN GT-TG: $k_{\min}=1.59$ $k_{\max}=2.40$ $\langle k \rangle=2.0$ $\sigma(k)=0.24$								
GT-TT	$2.17 \pm 0.26$	$GT^{ab}-TT^{ah}$	[ggtA/gttT]	2.46	$GT^{ab}-TT^{ay}$	[ggtC/gttG]	2.54	$GT^{ac}-TT^{ah}$	[ggtA/tttT]	2.50
		$GT^{ac}-TT^{ay}$	[ggtC/tttG]	2.20	$GT^{af}-TT^{ah}$	[tgtA/tttT]	1.72	$GT^{af}-TT^{ay}$	[tgtC/tttG]	1.87

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$
		$GT^{aw}-TT^{ah}$	[agtA/attT]	2.42	$GT^{aw}-TT^{ay}$	[agtC/attG]	2.13	$GT^{ax}-TT^{ah}$	[agtA/cttT]	1.80
		$GT^{ax}-TT^{ay}$	[agtC/cttG]	2.50	$GT^{az}-TT^{ah}$	[agtA/gttT]	2.52	$GT^{az}-TT^{ay}$	[agtC/gttG]	2.39
		$GT^{ba}-TT^{aa}$	[Agta/Ttta]	1.84	$GT^{ba}-TT^{ac}$	[Agta/Tttc]	2.03	$GT^{ba}-TT^{af}$	[Agta/Tttg]	1.97
		$GT^{ba}-TT^{ah}$	[AgTA/TttT]	2.03	$GT^{ba}-TT^{aw}$	[Agtc/Tttc]	1.91	$GT^{ba}-TT^{ag}$	[Agtc/TttG]	2.61
		$GT^{ba}-TT^{ba}$	[Agtc/Tttt]	2.14	$GT^{ba}-TT^e$	[Agtg/Tttg]	2.09	$GT^{ba}-TT^g$	[Agtg/Tttt]	2.13
		$GT^{ba}-TT^i$	[Agtt/Tttt]	2.08	$GT^p-TT^{ah}$	[cgtA/cttT]	1.90	$GT^p-TT^{ay}$	[cgtC/cttG]	2.44
		$GT^q-TT^{aa}$	[Cgta/Gtta]	2.50	$GT^q-TT^{ac}$	[Cgta/Gttc]	2.04	$GT^q-TT^{af}$	[Cgta/Gttg]	2.12
		$GT^q-TT^{ah}$	[CgtA/GttT]	1.72	$GT^q-TT^{aw}$	[Cgtc/Gttc]	2.15	$GT^q-TT^{ag}$	[Cgtc/GttG]	2.11
		$GT^q-TT^{ba}$	[Cgtc/Gttt]	2.27	$GT^q-TT^e$	[Cgtg/Gttg]	1.71	$GT^q-TT^g$	[Cgtg/Gttt]	2.26
		$GT^q-TT^i$	[Cgtt/Gttt]	2.57	$GT^s-TT^{ah}$	[cgtA/tttT]	2.24	$GT^s-TT^{ay}$	[cgtC/tttG]	2.27
		Summary for CDNN GT-TT: $k_{\min}=1.71$ $k_{\max}=2.61$ $\langle k \rangle=2.2$ $\sigma(k)=0.26$								
TA-CT	$1.64 \pm 0.52$	$TA-CT^{ak}$	[Tcc/Atc]	0.821	$TA-CT^{al}$	[CtA/GcT]	1.99	$TA-CT^{am}$	[Tcc/Att]	1.08
		$TA-CT^{aq}$	[Tca/Ata]	1.60	$TA-CT^{au}$	[Tcg/Atg]	2.77	$TA-CT^{av}$	[Tcg/Att]	1.55
		$TA-CT^{ba}$	[Tct/Att]	1.87	$TA-CT^{bc}$	[Tca/Atc]	1.23	$TA-CT^c$	[Tca/Atg]	1.64
		$TA-CT^r$	[AtA/TcT]	1.89						
		Summary for CDNN TA-CT: $k_{\min}=1.08$ $k_{\max}=2.77$ $\langle k \rangle=1.6$ $\sigma(k)=0.52$								
TA-GT	$3.44 \pm 0.89$	$TA-GT^{ak}$	[Tgc/Atc]	2.27	$TA-GT^{al}$	[CtA/GgT]	4.42	$TA-GT^{am}$	[Tgc/Att]	2.83
		$TA-GT^{aq}$	[Tga/Ata]	3.98	$TA-GT^{au}$	[Tgg/Atg]	4.34	$TA-GT^{av}$	[Tgg/Att]	4.09
		$TA-GT^{ba}$	[Tgt/Att]	3.42	$TA-GT^{bc}$	[Tga/Atc]	2.00	$TA-GT^c$	[Tga/Atg]	2.65
		$TA-GT^r$	[AtA/TgT]	4.42						
		Summary for CDNN TA-GT: $k_{\min}=2.00$ $k_{\max}=4.42$ $\langle k \rangle=3.4$ $\sigma(k)=0.89$								
TA-TT	$2.47 \pm 0.51$	$TA-TT^{ad}$	[Tta/Ata]	2.30	$TA-TT^{ag}$	[Ttg/Atg]	2.45	$TA-TT^{ah}$	[Ttg/Att]	2.99
		$TA-TT^{al}$	[Ttt/Att]	2.79	$TA-TT^{at}$	[Tta/Atc]	2.24	$TA-TT^f$	[Tta/Atg]	2.13
		$TA-TT^k$	[AtA/TtT]	3.44	$TA-TT^v$	[Ttc/Atc]	1.47	$TA-TT^x$	[CtA/GtT]	2.64
		$TA-TT^y$	[Ttc/Att]	2.21						
		Summary for CDNN TA-TT: $k_{\min}=1.47$ $k_{\max}=3.44$ $\langle k \rangle=2.5$ $\sigma(k)=0.51$								
TC-CT	$2.32 \pm 0.20$	$TC^{ae}-CT^{am}$	[atcA/cctT]	2.47	$TC^{ae}-CT^h$	[atcC/cctG]	2.01	$TC^{ai}-CT^{am}$	[atcA/gctT]	2.40
		$TC^{ai}-CT^h$	[atcC/gctG]	2.48	$TC^{am}-CT^{am}$	[AtcA/TctT]	2.39	$TC^{am}-CT^f$	[Atcc/Tctc]	2.35
		$TC^{am}-CT^h$	[AtcC/TctG]	2.16	$TC^{am}-CT^i$	[Atcc/Tctt]	2.51	$TC^{am}-CT^n$	[Atcg/Tctg]	1.95
		$TC^{am}-CT^o$	[Atcg/Tctt]	2.51	$TC^{am}-CT^s$	[Atct/Tctt]	2.25	$TC^{am}-CT^w$	[Atca/Tcta]	2.50
		$TC^f-CT^h$	[ctcC/cctG]	2.40	$TC^h-CT^h$	[Ctcc/GctG]	2.59	$TC^h-CT^i$	[Ctcc/Gctt]	2.20
		$TC^h-CT^n$	[Ctcc/Gctg]	2.51	$TC^h-CT^o$	[Ctcc/Gctt]	2.25	$TC^h-CT^s$	[Ctct/Gctt]	2.25
		$TC^h-CT^w$	[Ctca/Gcta]	1.84						
		Summary for CDNN TC-CT: $k_{\min}=1.84$ $k_{\max}=2.59$ $\langle k \rangle=2.3$ $\sigma(k)=0.20$								
TC-GT	$6.46 \pm 3.2$	$TC^{ac}-GT^{am}$	[ttgA/tctT]	5.75	$TC^{ac}-GT^h$	[ttgC/tctG]	4.76	$TC^{ao}-GT^{am}$	[atgA/actT]	8.94
		$TC^{ao}-GT^h$	[atgC/actG]	4.72	$TC^{ar}-GT^{am}$	[atgA/cctT]	14.2	$TC^{ar}-GT^h$	[atgC/cctG]	4.69
		$TC^{at}-GT^{am}$	[atgA/gctT]	16.9	$TC^{at}-GT^h$	[atgC/gctG]	5.04	$TC^{av}-GT^{ae}$	[Atga/Tctc]	13.2
		$TC^{av}-GT^{ai}$	[Atga/Tctg]	15.8	$TC^{av}-GT^{am}$	[AtgA/TctT]	5.59	$TC^{av}-GT^f$	[Atgc/Tctc]	4.58
		$TC^{av}-GT^h$	[AtgC/TctG]	9.33	$TC^{av}-GT^i$	[Atgc/Tctt]	4.70	$TC^{av}-GT^n$	[Atgg/Tctg]	4.88
		$TC^{av}-GT^o$	[Atgg/Tctt]	4.66	$TC^{av}-GT^s$	[Atgt/Tctt]	5.58	$TC^{av}-GT^w$	[Atga/Tcta]	5.71
		$TC^k-GT^{am}$	[ctgA/cctT]	4.38	$TC^k-GT^h$	[ctgC/cctG]	5.63	$TC^m-GT^{ae}$	[Ctga/Gctc]	4.79
		$TC^m-GT^{ai}$	[Ctga/Gctg]	5.09	$TC^m-GT^{am}$	[Ctga/GctT]	4.66	$TC^m-GT^f$	[Ctgc/Gctc]	5.52
		$TC^m-GT^h$	[Ctgc/GctG]	5.05	$TC^m-GT^i$	[Ctgc/Gctt]	6.59	$TC^m-GT^n$	[Ctgg/Gctg]	5.85
		$TC^m-GT^o$	[Ctgg/Gctt]	5.81	$TC^m-GT^s$	[Ctgt/Gctt]	4.54	$TC^m-GT^w$	[Ctga/Gcta]	4.64
		$TC^o-GT^{am}$	[ctgA/tctT]	5.12	$TC^o-GT^h$	[ctgc/tctG]	5.80	$TC^y-GT^{am}$	[gtgA/gctT]	5.06
		$TC^y-GT^h$	[gtgC/gctG]	5.29	$TC^z-GT^{am}$	[gtgA/tctT]	4.36	$TC^z-GT^h$	[gtgC/tctG]	5.30
		Summary for CDNN TC-GT: $k_{\min}=4.36$ $k_{\max}=16.9$ $\langle k \rangle=6.5$ $\sigma(k)=3.2$								
TC-TT	$2.97 \pm 0.36$	$TC^{ab}-TT^{as}$	[gttC/gctG]	3.18	$TC^{ab}-TT^y$	[gttA/gctT]	2.68	$TC^{ac}-TT^{as}$	[gttC/tctG]	2.99
		$TC^{ac}-TT^y$	[gttA/tctT]	3.39	$TC^{af}-TT^{as}$	[tttC/tctG]	2.87	$TC^{af}-TT^y$	[tttA/tctT]	2.56
		$TC^{aw}-TT^{as}$	[attC/actG]	2.62	$TC^{aw}-TT^y$	[attA/actT]	3.13	$TC^{ax}-TT^{as}$	[attC/cctG]	2.53
		$TC^{ax}-TT^y$	[attA/cctT]	2.93	$TC^{az}-TT^{as}$	[attC/gctG]	3.24	$TC^{az}-TT^y$	[attA/gctT]	3.29
		$TC^{ba}-TT^{aq}$	[Attc/Tctc]	2.59	$TC^{ba}-TT^{as}$	[AttC/TctG]	2.67	$TC^{ba}-TT^{au}$	[Attc/Tctt]	2.58
		$TC^{ba}-TT^{az}$	[Attg/Tctg]	2.99	$TC^{ba}-TT^b$	[Attt/Tctt]	3.45	$TC^{ba}-TT^{ba}$	[Attg/Tctt]	2.75

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CINN	$\langle k \rangle \pm \text{std}(k)$	CDNN	NN context	$k$	CDNN	NN context	$k$	CDNN	NN context	$k$			
		$TC^{ba}-TT^n$	[Atta/Tcta]	2.57	$TC^{ba}-TT^r$	[Atta/Tctc]	2.73	$TC^{ba}-TT^u$	[Atta/Tctg]	3.73			
		$TC^{ba}-TT^y$	[AttA/TctT]	2.51	$TC^p-TT^{as}$	[cttC/cctG]	2.99	$TC^p-TT^y$	[cttA/cctT]	3.44			
		$TC^q-TT^{aq}$	[Cttc/Gctc]	2.51	$TC^q-TT^{as}$	[CttC/GctG]	3.48	$TC^q-TT^{au}$	[Cttc/Gctt]	3.16			
		$TC^q-TT^{az}$	[Cttg/Gctg]	2.81	$TC^q-TT^b$	[Cttt/Gctt]	3.66	$TC^q-TT^{ba}$	[Cttg/Gctt]	3.55			
		$TC^q-TT^n$	[Ctta/Gcta]	2.76	$TC^q-TT^r$	[Ctta/Gctc]	3.40	$TC^q-TT^u$	[Ctta/Gctg]	2.93			
		$TC^q-TT^y$	[CttA/GctT]	2.68	$TC^s-TT^{as}$	[cttC/tctG]	2.77	$TC^s-TT^y$	[cttA/tctT]	2.70			
		Summary for CDNN TC-TT: $k_{\min}=2.51$ $k_{\max}=3.73$ $\langle k \rangle=3.0$ $\sigma(k)=0.36$											
TG-GT	$3.09 \pm 0.32$	$TG^{ac}-GT^{av}$	[ttgA/tgtT]	2.93	$TG^{ac}-GT^m$	[ttgC/tgtG]	3.50	$TG^{ao}-GT^{av}$	[atgA/agtT]	3.39			
		$TG^{ao}-GT^m$	[atgC/agtG]	3.08	$TG^{ar}-GT^{av}$	[atgA/cgtT]	3.23	$TG^{ar}-GT^m$	[atgC/cgtG]	2.84			
		$TG^{at}-GT^{av}$	[atgA/ggtT]	2.92	$TG^{at}-GT^m$	[atgC/ggtG]	2.50	$TG^{av}-GT^{av}$	[AtgA/TgtT]	2.57			
		$TG^{av}-GT^k$	[Atgc/Tgtc]	2.98	$TG^{av}-GT^m$	[AtgC/TgtG]	3.52	$TG^{av}-GT^o$	[Atgc/Tgtt]	3.35			
		$TG^{av}-GT^y$	[Atgg/Tgtg]	3.47	$TG^{av}-GT^z$	[Atgg/Tgtt]	3.37	$TG^k-GT^m$	[ctgC/cgtG]	2.99			
		$TG^m-GT^m$	[CtgC/GgtG]	2.69	$TG^m-GT^o$	[CtgC/Ggtt]	3.42	$TG^m-GT^y$	[Ctgg/Ggtg]	2.69			
		$TG^m-GT^z$	[Ctgg/Ggtt]	3.30									
		Summary for CDNN TG-GT: $k_{\min}=2.50$ $k_{\max}=3.52$ $\langle k \rangle=3.1$ $\sigma(k)=0.32$											
TG-TT	$5.20 \pm 7.1$	$TG^{ab}-TT^{ah}$	[gttA/ggtT]	2.05	$TG^{ab}-TT^{ay}$	[gttC/ggtG]	2.09	$TG^{ac}-TT^{ah}$	[gttA/tgtT]	1.93			
		$TG^{ac}-TT^{ay}$	[gttC/tgtG]	22.0	$TG^{af}-TT^{ah}$	[ttaa/tgtT]	1.73	$TG^{af}-TT^{ay}$	[tttC/tgtG]	17.8			
		$TG^{aw}-TT^{ah}$	[attA/agtT]	1.96	$TG^{aw}-TT^{ay}$	[attC/agtG]	1.70	$TG^{ax}-TT^{ah}$	[attA/cgtT]	2.13			
		$TG^{ax}-TT^{ay}$	[attC/cgtG]	24.4	$TG^{az}-TT^{ah}$	[attA/ggtT]	1.77	$TG^{az}-TT^{ay}$	[attC/ggtG]	8.13			
		$TG^{ba}-TT^{aa}$	[Atta/Tgta]	1.65	$TG^{ba}-TT^{ac}$	[Atta/Tgtc]	2.12	$TG^{ba}-TT^{af}$	[Atta/Tgtg]	2.08			
		$TG^{ba}-TT^{ah}$	[AttA/TgtT]	1.78	$TG^{ba}-TT^{aw}$	[Attc/Tgtc]	1.94	$TG^{ba}-TT^{ay}$	[AttC/TgtG]	16.0			
		$TG^{ba}-TT^{ba}$	[Attc/Tgtt]	2.30	$TG^{ba}-TT^e$	[Attg/Tgtg]	2.17	$TG^{ba}-TT^g$	[Attg/Tgtt]	1.67			
		$TG^{ba}-TT^i$	[Attt/Tgtt]	1.94	$TG^p-TT^{ah}$	[cttA/cgtT]	1.92	$TG^p-TT^{ay}$	[cttC/cgtG]	2.00			
		$TG^q-TT^{aa}$	[Ctta/Ggta]	1.76	$TG^q-TT^{ac}$	[Ctta/Ggtc]	2.02	$TG^q-TT^{af}$	[Ctta/Ggtg]	2.08			
		$TG^q-TT^{ah}$	[CttA/GgtT]	2.10	$TG^q-TT^{aw}$	[Cttc/Ggtc]	1.97	$TG^q-TT^{ay}$	[CttC/GgtG]	14.0			
		$TG^q-TT^{ba}$	[Cttc/Ggtt]	1.98	$TG^q-TT^e$	[Cttg/Ggtg]	1.75	$TG^q-TT^g$	[Cttg/Ggtt]	2.31			
		$TG^q-TT^i$	[Cttt/Ggtt]	2.08	$TG^s-TT^{ah}$	[cttA/tgtT]	2.18	$TG^s-TT^{ay}$	[cttC/tgtG]	27.7			
		Summary for CDNN TG-TT: $k_{\min}=1.65$ $k_{\max}=27.7$ $\langle k \rangle=5.2$ $\sigma(k)=7.1$											
TT-TT	$3.33 \pm 0.42$	$TT^{ai}-TT^{al}$	[attA/attT]	2.84	$TT^{ai}-TT^{bc}$	[attC/attG]	3.43	$TT^{aj}-TT^{al}$	[attA/cttT]	3.24			
		$TT^{aj}-TT^{bc}$	[attC/cttG]	3.15	$TT^{ak}-TT^{al}$	[attA/gttT]	2.92	$TT^{ak}-TT^{bc}$	[attC/gttG]	3.79			
		$TT^{al}-TT^{al}$	[AttA/TttT]	2.99	$TT^{al}-TT^b$	[Attc/Tttt]	3.21	$TT^{al}-TT^{bb}$	[Attc/Tttc]	3.20			
		$TT^{al}-TT^{bc}$	[AttC/TttG]	4.02	$TT^{al}-TT^h$	[Attg/Tttg]	3.75	$TT^{al}-TT^i$	[Attg/Tttt]	3.71			
		$TT^{al}-TT^j$	[Attt/Tttt]	3.20	$TT^{bb}-TT^{bc}$	[cttC/cttG]	3.78	$TT^b-TT^{bc}$	[cttC/tttG]	3.23			
		$TT^{bc}-TT^{bc}$	[CttC/GttG]	2.69	$TT^{bc}-TT^h$	[Cttg/Gttg]	2.54	$TT^{bc}-TT^i$	[Cttg/Gttt]	3.85			
		$TT^{bc}-TT^j$	[Cttt/Gttt]	3.81									
		Summary for CD TT-TT: min=2.54 max=4.02 average=3.4 std=0.42											



Table S4. Morse potentials  $D$  for canonical base pairs (CBP) and context independent (CI) base pairs (bp) in meV.

bp	$D$	bp	$D$	bp	$D$	bp	$D$
AA	6.54	AC	2.21	AG	16.5	AT	33.7
CC	2.28	CG	69.5	CT	0.944	GG	18.3
GT	5.55	TT	5.06				

Table S5. Stacking potentials  $k$  for canonical base pairs (CBP) and context independent (CI) nearest-neighbours (nn) in eV/nm<sup>2</sup>.

nn	$k$	nn	$k$	nn	$k$	nn	$k$	nn	$k$	nn	$k$	nn	$k$	nn	$k$
AA-AA	9.23	AA-AC	4.08	AA-AG	8.37	AA-AT	2.47	AA-CA	3.47	AA-CC	0.766	AA-CG	0.853	AA-CT	2.07
AA-GA	4.46	AA-GC	1.22	AA-GG	2.85	AA-GT	4.67	AA-TA	2.90	AA-TC	3.74	AA-TG	9.08	AA-TT	9.65
AC-AC	3.30	AC-AG	8.93	AC-AT	3.11	AC-CA	2.51	AC-CC	1.12	AC-CG	0.825	AC-CT	1.79	AC-GA	4.08
AC-GC	2.40	AC-GG	6.72	AC-GT	9.12	AC-TA	0.923	AC-TC	3.34	AC-TG	4.81	AC-TT	6.61	AG-AC	1.76
AG-AG	4.87	AG-AT	6.66	AG-CC	1.57	AG-CG	3.70	AG-CT	4.84	AG-GA	3.42	AG-GC	6.05	AG-GG	3.48
AG-GT	6.16	AG-TA	5.94	AG-TC	1.97	AG-TG	7.83	AG-TT	6.37	AT-AC	1.54	AT-AG	1.25	AT-AT	3.50
AT-CC	0.333	AT-CG	1.74	AT-CT	1.65	AT-GC	2.07	AT-GG	2.55	AT-GT	2.56	AT-TA	1.86	AT-TC	2.08
AT-TG	6.73	AT-TT	4.32	CA-AC	2.70	CA-AG	3.33	CA-AT	0.945	CA-CC	2.32	CA-CG	0.910	CA-CT	3.35
CA-GC	0.766	CA-GG	4.36	CA-GT	1.61	CA-TC	2.13	CA-TG	6.15	CA-TT	2.03	CC-AG	2.56	CC-AT	0.752
CC-CC	2.28	CC-CG	0.413	CC-CT	2.88	CC-GC	1.20	CC-GG	6.57	CC-GT	2.21	CC-TC	2.18	CC-TG	3.72
CC-TT	0.843	CG-AG	0.999	CG-AT	3.30	CG-CG	2.09	CG-CT	1.10	CG-GC	2.77	CG-GG	2.32	CG-GT	2.92
CG-TC	1.45	CG-TG	3.70	CG-TT	1.78	CT-AG	2.53	CT-AT	1.08	CT-CG	0.524	CT-CT	1.77	CT-GG	3.34
CT-GT	1.59	CT-TC	1.71	CT-TG	2.49	CT-TT	2.23	GA-AG	17.3	GA-AT	1.81	GA-CG	1.06	GA-CT	1.86
GA-GG	4.15	GA-GT	3.47	GA-TG	3.22	GA-TT	3.12	GC-AT	3.80	GC-CG	3.23	GC-CT	0.567	GC-GG	2.69
GC-GT	2.47	GC-TG	2.60	GC-TT	0.597	GG-AT	2.46	GG-CT	3.49	GG-GG	1.62	GG-GT	2.37	GG-TG	3.65
GG-TT	1.19	GT-AT	6.26	GT-CT	1.89	GT-GT	4.18	GT-TG	2.00	GT-TT	1.71	TA-AT	1.99	TA-CT	1.71
TA-GT	3.80	TA-TT	2.68	TC-CT	3.07	TC-GT	4.92	TC-TT	3.09	TG-GT	4.45	TG-TT	3.20	TT-TT	4.37

Table S6. Morse potentials  $D$  for context dependent (CD) base pairs (bp) in meV. Hyperlinks, in red, lead to the corresponding context group of table S2.

bp	context	$D$ (meV)	bp	context	$D$ (meV)	bp	context	$D$ (meV)	bp	context	$D$ (meV)
<a href="#">AA<sup>a</sup></a>	{aaa/aaa}	5.62	<a href="#">AA<sup>b</sup></a>	{cat/tat}	7.87	<a href="#">AA<sup>c</sup></a>	{aaa/gag}	16.6	<a href="#">AA<sup>d</sup></a>	{gag/gag}	32.3
<a href="#">AA<sup>e</sup></a>	{gag/gat}	14.9	<a href="#">AA<sup>f</sup></a>	{Aaa/Tag}	4.70	<a href="#">AA<sup>g</sup></a>	{gag/tat}	5.77	<a href="#">AA<sup>h</sup></a>	{gat/gat}	6.27
<a href="#">AA<sup>i</sup></a>	{gat/tat}	5.43	<a href="#">AA<sup>j</sup></a>	{tat/tat}	6.43	<a href="#">AA<sup>k</sup></a>	{Aaa/TaT}	5.39	<a href="#">AA<sup>l</sup></a>	{aac/aac}	6.28
<a href="#">AA<sup>m</sup></a>	{aaC/aaG}	6.87	<a href="#">AA<sup>n</sup></a>	{aac/aat}	5.02	<a href="#">AA<sup>o</sup></a>	{aaa/aac}	7.19	<a href="#">AA<sup>p</sup></a>	{aac/cac}	21.1
<a href="#">AA<sup>q</sup></a>	{Caa/Gac}	2.56	<a href="#">AA<sup>r</sup></a>	{aac/cat}	8.50	<a href="#">AA<sup>s</sup></a>	{aac/gac}	5.97	<a href="#">AA<sup>t</sup></a>	{Caa/Gag}	6.24
<a href="#">AA<sup>u</sup></a>	{aac/gat}	2.50	<a href="#">AA<sup>v</sup></a>	{Aac/Tac}	5.85	<a href="#">AA<sup>w</sup></a>	{aaa/aag}	5.82	<a href="#">AA<sup>x</sup></a>	{AaC/TaG}	7.73
<a href="#">AA<sup>y</sup></a>	{Aac/Tat}	5.35	<a href="#">AA<sup>z</sup></a>	{aag/aag}	21.0	<a href="#">AA<sup>aa</sup></a>	{aag/aat}	7.43	<a href="#">AA<sup>ab</sup></a>	{aag/cag}	6.24
<a href="#">AA<sup>ac</sup></a>	{aag/cat}	2.79	<a href="#">AA<sup>ad</sup></a>	{Aaa/Taa}	0.996	<a href="#">AA<sup>ae</sup></a>	{aag/gag}	17.3	<a href="#">AA<sup>af</sup></a>	{aag/gat}	7.98
<a href="#">AA<sup>ag</sup></a>	{Aag/Tag}	0.989	<a href="#">AA<sup>ah</sup></a>	{Aag/Tat}	4.64	<a href="#">AA<sup>ai</sup></a>	{aat/aat}	3.32	<a href="#">AA<sup>aj</sup></a>	{aat/cat}	8.12
<a href="#">AA<sup>ak</sup></a>	{aat/gat}	5.24	<a href="#">AA<sup>al</sup></a>	{Aat/Tat}	1.97	<a href="#">AA<sup>am</sup></a>	{aaa/cac}	10.2	<a href="#">AA<sup>an</sup></a>	{aaa/cag}	5.39
<a href="#">AA<sup>ao</sup></a>	{cac/cac}	1.20	<a href="#">AA<sup>ap</sup></a>	{Cac/Gac}	4.54	<a href="#">AA<sup>aq</sup></a>	{cac/cat}	44.9	<a href="#">AA<sup>ar</sup></a>	{CaC/GaG}	4.66
<a href="#">AA<sup>as</sup></a>	{Cac/Gat}	4.14	<a href="#">AA<sup>at</sup></a>	{Aaa/Tac}	3.12	<a href="#">AA<sup>au</sup></a>	{cac/tat}	17.9	<a href="#">AA<sup>av</sup></a>	{cag/cag}	5.40
<a href="#">AA<sup>aw</sup></a>	{cag/cat}	4.89	<a href="#">AA<sup>ax</sup></a>	{Cag/Gag}	4.34	<a href="#">AA<sup>ay</sup></a>	{Cag/Gat}	5.25	<a href="#">AA<sup>az</sup></a>	{cag/tag}	7.71
<a href="#">AA<sup>ba</sup></a>	{cag/tat}	3.35	<a href="#">AA<sup>bb</sup></a>	{cat/cat}	20.8	<a href="#">AA<sup>bc</sup></a>	{Cat/Gat}	7.62	<a href="#">AC<sup>a</sup></a>	{aaa/aca}	2.31
<a href="#">AC<sup>b</sup></a>	{aaa/gcg}	10.4	<a href="#">AC<sup>c</sup></a>	{Aaa/Tcg}	0.731	<a href="#">AC<sup>d</sup></a>	{cac/ccg}	2.51	<a href="#">AC<sup>e</sup></a>	{Cac/Gcc}	0.780
<a href="#">AC<sup>f</sup></a>	{cac/cct}	16.9	<a href="#">AC<sup>g</sup></a>	{CaC/GcG}	2.45	<a href="#">AC<sup>h</sup></a>	{Cac/Gct}	1.74	<a href="#">AC<sup>i</sup></a>	{cac/tct}	2.24
<a href="#">AC<sup>j</sup></a>	{cag/ccg}	2.20	<a href="#">AC<sup>k</sup></a>	{cag/cct}	2.46	<a href="#">AC<sup>l</sup></a>	{Cag/Gcg}	3.11	<a href="#">AC<sup>m</sup></a>	{Cag/Gct}	3.29
<a href="#">AC<sup>n</sup></a>	{cag/tcg}	2.08	<a href="#">AC<sup>o</sup></a>	{cag/tct}	2.22	<a href="#">AC<sup>p</sup></a>	{cat/cct}	2.17	<a href="#">AC<sup>q</sup></a>	{Cat/Gct}	1.95
<a href="#">AC<sup>r</sup></a>	{AaA/TcT}	2.82	<a href="#">AC<sup>s</sup></a>	{cat/tct}	1.88	<a href="#">AC<sup>t</sup></a>	{aac/acc}	2.22	<a href="#">AC<sup>u</sup></a>	{aaC/acG}	2.31
<a href="#">AC<sup>v</sup></a>	{aaa/acc}	3.40	<a href="#">AC<sup>w</sup></a>	{aac/act}	1.79	<a href="#">AC<sup>x</sup></a>	{gag/gcg}	2.16	<a href="#">AC<sup>y</sup></a>	{gag/gct}	2.10
<a href="#">AC<sup>z</sup></a>	{gag/tct}	2.96	<a href="#">AC<sup>aa</sup></a>	{aac/ccc}	1.89	<a href="#">AC<sup>ab</sup></a>	{gat/gct}	9.34	<a href="#">AC<sup>ac</sup></a>	{gat/tct}	7.24
<a href="#">AC<sup>ad</sup></a>	{Caa/Gcc}	0.821	<a href="#">AC<sup>ae</sup></a>	{aac/cct}	2.50	<a href="#">AC<sup>af</sup></a>	{tat/tct}	2.08	<a href="#">AC<sup>ag</sup></a>	{aac/gcc}	1.24
<a href="#">AC<sup>ah</sup></a>	{Caa/Gcg}	2.18	<a href="#">AC<sup>ai</sup></a>	{aac/gct}	1.53	<a href="#">AC<sup>aj</sup></a>	{aaa/acg}	3.11	<a href="#">AC<sup>ak</sup></a>	{Aac/Tcc}	1.20
<a href="#">AC<sup>al</sup></a>	{AaC/TcG}	2.30	<a href="#">AC<sup>am</sup></a>	{Aac/Tct}	0.575	<a href="#">AC<sup>an</sup></a>	{aag/acg}	2.89	<a href="#">AC<sup>ao</sup></a>	{aag/act}	3.74
<a href="#">AC<sup>ap</sup></a>	{aag/ccg}	1.92	<a href="#">AC<sup>aq</sup></a>	{Aaa/Tca}	1.22	<a href="#">AC<sup>ar</sup></a>	{aag/cct}	2.27	<a href="#">AC<sup>as</sup></a>	{aag/gcg}	2.19

(continued on next page)

(S6 continued)

bp	context	$D$ (meV)	bp	context	$D$ (meV)	bp	context	$D$ (meV)	bp	context	$D$ (meV)
$AC^{at}$	{aag/gct}	6.79	$AC^{au}$	{Aag/Tcg}	0.440	$AC^{av}$	{Aag/Tct}	0.623	$AC^{aw}$	{aat/act}	2.38
$AC^{ax}$	{aat/cct}	4.36	$AC^{ay}$	{aaa/ccg}	2.26	$AC^{az}$	{aat/gct}	2.41	$AC^{ba}$	{Aat/Tct}	1.03
$AC^{bb}$	{aaa/ccg}	2.10	$AC^{bc}$	{Aaa/Tcg}	0.600	$AG^a$	{aaa/aga}	19.7	$AG^b$	{aaa/ggg}	16.3
$AG^c$	{Aaa/Tgg}	14.3	$AG^d$	{cac/cgc}	14.6	$AG^e$	{Cac/Ggc}	4.81	$AG^f$	{cac/cgt}	44.8
$AG^g$	{CaC/GgG}	18.2	$AG^h$	{Cac/Ggt}	9.51	$AG^i$	{cac/tgt}	17.5	$AG^j$	{cag/cgg}	17.9
$AG^k$	{cag/cgt}	26.6	$AG^l$	{Cag/Ggg}	13.5	$AG^m$	{Cag/Ggt}	17.9	$AG^n$	{cag/tgg}	17.7
$AG^o$	{cag/tgt}	19.2	$AG^p$	{cat/cgt}	49.1	$AG^q$	{Cat/Ggt}	14.8	$AG^r$	{AaA/TgT}	18.5
$AG^s$	{cat/tgt}	19.9	$AG^t$	{aac/agc}	14.5	$AG^u$	{aaC/agG}	23.9	$AG^v$	{aaa/agc}	16.9
$AG^w$	{aac/agt}	16.2	$AG^x$	{gag/ggg}	17.8	$AG^y$	{gag/ggt}	19.0	$AG^z$	{gag/tgt}	17.4
$AG^{aa}$	{aac/cgc}	17.6	$AG^{ab}$	{gat/ggt}	19.9	$AG^{ac}$	{gat/tgt}	14.0	$AG^{ad}$	{Caa/Ggc}	9.39
$AG^{ae}$	{aac/cgt}	17.1	$AG^{af}$	{tat/tgt}	13.7	$AG^{ag}$	{aac/ggc}	19.7	$AG^{ah}$	{Caa/Ggg}	17.1
$AG^{ai}$	{aac/ggt}	13.2	$AG^{aj}$	{aaa/agg}	23.3	$AG^{ak}$	{Aac/Tgc}	15.0	$AG^{al}$	{AaC/TgG}	18.8
$AG^{am}$	{Aac/Tgt}	13.3	$AG^{an}$	{aag/agg}	23.7	$AG^{ao}$	{aag/agt}	23.2	$AG^{ap}$	{aag/cgg}	17.6
$AG^{aq}$	{Aaa/Tga}	14.2	$AG^{ar}$	{aag/cgt}	18.9	$AG^{as}$	{aag/ggg}	14.9	$AG^{at}$	{aag/ggt}	20.6
$AG^{au}$	{Aag/Tgg}	4.41	$AG^{av}$	{Aag/Tgt}	7.02	$AG^{aw}$	{aat/agt}	15.1	$AG^{ax}$	{aat/cgt}	22.2
$AG^{ay}$	{aaa/cgc}	17.7	$AG^{az}$	{aat/ggt}	16.3	$AG^{ba}$	{Aat/Tgt}	12.3	$AG^{bb}$	{aaa/cgg}	16.4
$AG^{bc}$	{Aaa/Tgc}	14.6	$CC^a$	{aca/aca}	2.13	$CC^b$	{cct/tct}	2.55	$CC^c$	{aca/gcg}	3.89
$CC^d$	{gcg/gcg}	2.51	$CC^e$	{gcg/gct}	12.3	$CC^f$	{Aca/Tcg}	2.32	$CC^g$	{gcg/tct}	2.64
$CC^h$	{gct/gct}	1.85	$CC^i$	{gct/tct}	2.33	$CC^j$	{tct/tct}	1.85	$CC^k$	{AcA/TcT}	2.26
$CC^l$	{acc/acc}	2.65	$CC^m$	{acc/acg}	2.40	$CC^n$	{acc/act}	1.86	$CC^o$	{aca/acc}	2.52
$CC^p$	{acc/ccg}	2.16	$CC^q$	{Cca/Gcc}	1.29	$CC^r$	{acc/cct}	1.95	$CC^s$	{acc/gcc}	1.88
$CC^t$	{Cca/Gcg}	3.07	$CC^u$	{acc/gct}	1.71	$CC^v$	{Acc/Tcc}	0.625	$CC^w$	{aca/acg}	2.64
$CC^x$	{AcC/TcG}	2.29	$CC^y$	{Acc/Tct}	0.488	$CC^z$	{acc/gcg}	1.95	$CC^{aa}$	{acc/act}	2.78
$CC^{ab}$	{acc/cgg}	1.77	$CC^{ac}$	{acc/cct}	1.94	$CC^{ad}$	{Aca/Tca}	2.58	$CC^{ae}$	{acc/gcg}	19.2
$CC^{af}$	{acc/gct}	2.23	$CC^{ag}$	{Acc/Tcg}	0.800	$CC^{ah}$	{Acc/Tct}	0.693	$CC^{ai}$	{act/act}	2.69
$CC^{aj}$	{act/cct}	1.94	$CC^{ak}$	{act/gct}	1.89	$CC^{al}$	{Act/Tct}	2.08	$CC^{am}$	{aca/ccg}	1.94
$CC^{an}$	{aca/cgg}	1.87	$CC^{ao}$	{ccc/ccg}	2.40	$CC^{ap}$	{Ccc/Gcc}	0.769	$CC^{aq}$	{ccc/cct}	1.94
$CC^{ar}$	{Ccc/GcG}	2.62	$CC^{as}$	{Ccc/Gct}	1.28	$CC^{at}$	{Aca/Tcc}	0.501	$CC^{au}$	{ccc/tct}	2.46
$CC^{av}$	{ccg/cgg}	2.15	$CC^{aw}$	{ccg/cct}	2.32	$CC^{ax}$	{Ccg/Gcg}	1.93	$CC^{ay}$	{Ccg/Gct}	2.02
$CC^{az}$	{ccg/tcg}	1.71	$CC^{ba}$	{ccg/tct}	2.33	$CC^{bb}$	{cct/cct}	2.40	$CC^{bc}$	{Cct/Gct}	2.18
$CT^a$	{aca/ata}	0.969	$CT^b$	{aca/gtg}	0.911	$CT^c$	{Aca/Ttg}	0.413	$CT^d$	{ccc/ctc}	0.812
$CT^e$	{Ccc/Gtc}	0.780	$CT^f$	{ccc/ctt}	0.834	$CT^g$	{CcC/GtG}	0.831	$CT^h$	{Ccc/Gtt}	0.816
$CT^i$	{ccc/ttt}	1.13	$CT^j$	{ccg/ctg}	1.02	$CT^k$	{ccg/ctt}	1.05	$CT^l$	{Ccg/Gtg}	0.995
$CT^m$	{Ccg/Gtt}	0.763	$CT^n$	{ccg/ttg}	0.839	$CT^o$	{cct/ttt}	0.792	$CT^p$	{cct/ctt}	0.923
$CT^q$	{Cct/Gtt}	1.10	$CT^r$	{AcA/TtT}	1.88	$CT^s$	{cct/ttt}	1.04	$CT^t$	{acc/atc}	1.07
$CT^u$	{acc/atG}	0.774	$CT^v$	{aca/atc}	1.07	$CT^w$	{acc/att}	0.992	$CT^x$	{gcg/gtg}	1.08
$CT^y$	{gcg/gtt}	0.872	$CT^z$	{gcg/ttt}	0.817	$CT^{aa}$	{acc/ctc}	1.02	$CT^{ab}$	{gct/gtt}	0.889
$CT^{ac}$	{gct/ttt}	0.833	$CT^{ad}$	{Cca/Gtc}	0.862	$CT^{ae}$	{acc/ctt}	0.991	$CT^{af}$	{tct/ttt}	1.18
$CT^{ag}$	{acc/gtc}	0.884	$CT^{ah}$	{Cca/Gtg}	1.14	$CT^{ai}$	{acc/gtt}	0.814	$CT^{aj}$	{aca/atg}	2.14
$CT^{ak}$	{Acc/Ttc}	0.485	$CT^{al}$	{AcC/TtG}	1.15	$CT^{am}$	{Acc/Ttt}	0.459	$CT^{an}$	{acc/atg}	34.4
$CT^{ao}$	{acc/att}	1.73	$CT^{ap}$	{acc/ctg}	1.91	$CT^{aq}$	{Aca/Tta}	0.782	$CT^{ar}$	{acc/ctt}	2.88
$CT^{as}$	{acc/gtg}	0.879	$CT^{at}$	{acc/gtt}	0.847	$CT^{au}$	{Acc/Ttg}	0.620	$CT^{av}$	{Acc/Ttt}	0.553
$CT^{aw}$	{act/att}	1.06	$CT^{ax}$	{act/ctt}	0.992	$CT^{ay}$	{aca/ctc}	0.873	$CT^{az}$	{act/gtt}	0.772
$CT^{ba}$	{Act/Ttt}	0.708	$CT^{bb}$	{aca/ctg}	2.07	$CT^{bc}$	{Aca/Ttc}	0.199	$GG^a$	{aga/aga}	17.8
$GG^b$	{cgt/tgt}	19.1	$GG^c$	{aga/ggg}	38.4	$GG^d$	{ggg/ggg}	15.7	$GG^e$	{ggg/ggt}	29.0
$GG^f$	{Aga/Tgg}	13.6	$GG^g$	{ggg/tgt}	32.3	$GG^h$	{ggt/ggt}	22.5	$GG^i$	{ggt/tgt}	16.9
$GG^j$	{tgt/tgt}	20.1	$GG^k$	{AgA/TgT}	19.4	$GG^l$	{agc/agc}	19.3	$GG^m$	{agC/agG}	17.5
$GG^n$	{agc/agt}	23.1	$GG^o$	{aga/agc}	17.8	$GG^p$	{agc/cgc}	55.8	$GG^q$	{Cga/Ggc}	12.8
$GG^r$	{agc/cgt}	54.2	$GG^s$	{agc/ggc}	19.0	$GG^t$	{Cga/Ggg}	13.0	$GG^u$	{agc/ggt}	22.4
$GG^v$	{Agc/Tgc}	4.21	$GG^w$	{aga/agg}	33.7	$GG^x$	{AgC/TgG}	27.4	$GG^y$	{Agc/Tgt}	18.7
$GG^z$	{agg/agg}	22.6	$GG^{aa}$	{agg/agt}	20.9	$GG^{ab}$	{agg/cgg}	22.9	$GG^{ac}$	{agg/cgt}	17.5
$GG^{ad}$	{Aga/Tga}	17.2	$GG^{ae}$	{agg/ggg}	17.2	$GG^{af}$	{agg/ggt}	29.2	$GG^{ag}$	{Agg/Tgg}	20.0
$GG^{ah}$	{Agg/Tgt}	22.8	$GG^{ai}$	{agt/agt}	20.9	$GG^{aj}$	{agt/cgt}	19.7	$GG^{ak}$	{agt/ggt}	28.3

(continued on next page)

(S6 continued)

bp	context	$D$ (meV)	bp	context	$D$ (meV)	bp	context	$D$ (meV)	bp	context	$D$ (meV)
$GG^{al}$	{Agt/Tgt}	16.7	$GG^{am}$	{aga/cgc}	45.7	$GG^{an}$	{aga/cgg}	23.1	$GG^{ao}$	{cgc/cgc}	65.5
$GG^{ap}$	{Cgc/Ggc}	9.34	$GG^{aq}$	{cgc/cgt}	65.6	$GG^{ar}$	{CgC/GgG}	18.8	$GG^{as}$	{Cgc/Ggt}	14.8
$GG^{at}$	{Aga/Tgt}	1.78	$GG^{au}$	{cgc/tgt}	57.9	$GG^{av}$	{cgg/cgg}	20.2	$GG^{aw}$	{cgg/cgt}	21.5
$GG^{ax}$	{Cgg/Ggg}	21.0	$GG^{ay}$	{Cgg/Ggt}	24.4	$GG^{az}$	{cgg/tgg}	22.1	$GG^{ba}$	{cgg/tgt}	16.8
$GG^{bb}$	{cgt/cgt}	16.6	$GG^{bc}$	{Cgt/Ggt}	19.9	$GT^a$	{aga/ata}	7.78	$GT^b$	{aga/gtg}	7.05
$GT^c$	{Aga/Ttg}	7.73	$GT^d$	{cgc/ctc}	9.71	$GT^e$	{Cgc/Gtc}	9.07	$GT^f$	{cgc/ctt}	9.27
$GT^g$	{CgC/GtG}	8.03	$GT^h$	{Cgc/Gtt}	8.62	$GT^i$	{cgc/ttt}	9.74	$GT^j$	{cgg/ctg}	6.90
$GT^k$	{cgg/ctt}	8.77	$GT^l$	{Cgg/Gtg}	7.01	$GT^m$	{Cgg/Gtt}	8.09	$GT^n$	{cgg/ttg}	8.92
$GT^o$	{cgg/ttt}	7.80	$GT^p$	{cgt/ctt}	10.4	$GT^q$	{Cgt/Gtt}	8.55	$GT^r$	{AgA/TtT}	8.68
$GT^s$	{cgt/ttt}	7.55	$GT^t$	{agc/atc}	7.03	$GT^u$	{agC/atG}	9.82	$GT^v$	{aga/atc}	8.09
$GT^w$	{agc/att}	8.73	$GT^x$	{ggg/gtg}	8.64	$GT^y$	{ggg/gtt}	8.44	$GT^z$	{ggg/ttt}	8.26
$GT^{aa}$	{agc/ctc}	6.62	$GT^{ab}$	{ggg/gtt}	7.51	$GT^{ac}$	{ggg/ttt}	7.40	$GT^{ad}$	{Cga/Gtc}	7.51
$GT^{ae}$	{agc/ctt}	7.29	$GT^{af}$	{tgt/ttt}	8.33	$GT^{ag}$	{agc/gtc}	8.42	$GT^{ah}$	{Cga/Ggt}	7.05
$GT^{ai}$	{agc/gtt}	8.15	$GT^{aj}$	{aga/atg}	13.9	$GT^{ak}$	{Agc/Ttc}	7.32	$GT^{al}$	{AgC/TtG}	17.5
$GT^{am}$	{Agc/Ttt}	7.26	$GT^{an}$	{agg/atg}	9.78	$GT^{ao}$	{agg/att}	10.3	$GT^{ap}$	{agg/ctg}	8.11
$GT^{aq}$	{Aga/Tta}	8.40	$GT^{ar}$	{agg/ctt}	9.75	$GT^{as}$	{agg/gtg}	8.51	$GT^{at}$	{agg/gtt}	9.87
$GT^{au}$	{Agg/Ttg}	8.30	$GT^{av}$	{Agg/Ttt}	7.50	$GT^{aw}$	{agt/att}	7.73	$GT^{ax}$	{agt/ctt}	7.08
$GT^{ay}$	{aga/ctc}	10.4	$GT^{az}$	{agt/gtt}	6.90	$GT^{ba}$	{Agt/Ttt}	7.87	$GT^{bb}$	{aga/ctg}	11.7
$GT^{bc}$	{Aga/Ttc}	7.05	$TT^a$	{ata/ata}	5.42	$TT^b$	{ctt/ttt}	5.42	$TT^c$	{ata/gtg}	4.81
$TT^d$	{gtg/gtg}	4.77	$TT^e$	{gtg/gtt}	4.81	$TT^f$	{Ata/Ttg}	4.76	$TT^g$	{gtg/ttt}	4.08
$TT^h$	{ggt/gtt}	4.45	$TT^i$	{ggt/ttt}	5.68	$TT^j$	{ttt/ttt}	4.33	$TT^k$	{AtA/TtT}	6.60
$TT^l$	{atc/atc}	5.07	$TT^m$	{atC/atG}	6.81	$TT^n$	{atc/att}	2.96	$TT^o$	{ata/atc}	4.30
$TT^p$	{atc/ctc}	6.30	$TT^q$	{Cta/Gtc}	4.58	$TT^r$	{atc/ctt}	5.11	$TT^s$	{atc/gtc}	4.25
$TT^t$	{Cta/Gtg}	1.61	$TT^u$	{atc/gtt}	3.55	$TT^v$	{Atc/Ttc}	2.17	$TT^w$	{ata/atg}	8.81
$TT^x$	{AtC/TtG}	6.47	$TT^y$	{Atc/Ttt}	2.04	$TT^z$	{atg/atg}	4.09	$TT^{aa}$	{atg/att}	5.19
$TT^{ab}$	{atg/ctg}	10.5	$TT^{ac}$	{atg/ctt}	4.76	$TT^{ad}$	{Ata/Tta}	5.80	$TT^{ae}$	{atg/gtg}	4.52
$TT^{af}$	{atg/gtt}	5.49	$TT^{ag}$	{Atg/Ttg}	2.10	$TT^{ah}$	{Atg/Ttt}	2.27	$TT^{ai}$	{att/att}	5.32
$TT^{aj}$	{att/ctt}	4.19	$TT^{ak}$	{att/gtt}	4.56	$TT^{al}$	{Att/Ttt}	2.18	$TT^{am}$	{ata/ctc}	6.30
$TT^{an}$	{ata/ctg}	16.2	$TT^{ao}$	{ctc/ctc}	6.05	$TT^{ap}$	{Ctc/Gtc}	6.69	$TT^{aq}$	{ctc/ctt}	12.5
$TT^{ar}$	{CtC/GtG}	6.80	$TT^{as}$	{Ctc/Gtt}	4.61	$TT^{at}$	{Ata/Ttc}	3.11	$TT^{au}$	{ctc/ttt}	4.19
$TT^{av}$	{ctg/ctg}	4.56	$TT^{aw}$	{ctg/ctt}	5.64	$TT^{ax}$	{Ctg/Gtg}	4.06	$TT^{ay}$	{Ctg/Gtt}	3.83
$TT^{az}$	{ctg/ttg}	4.10	$TT^{ba}$	{ctg/ttt}	4.06	$TT^{bb}$	{ctt/ctt}	5.37	$TT^{bc}$	{Ctt/Gtt}	5.11

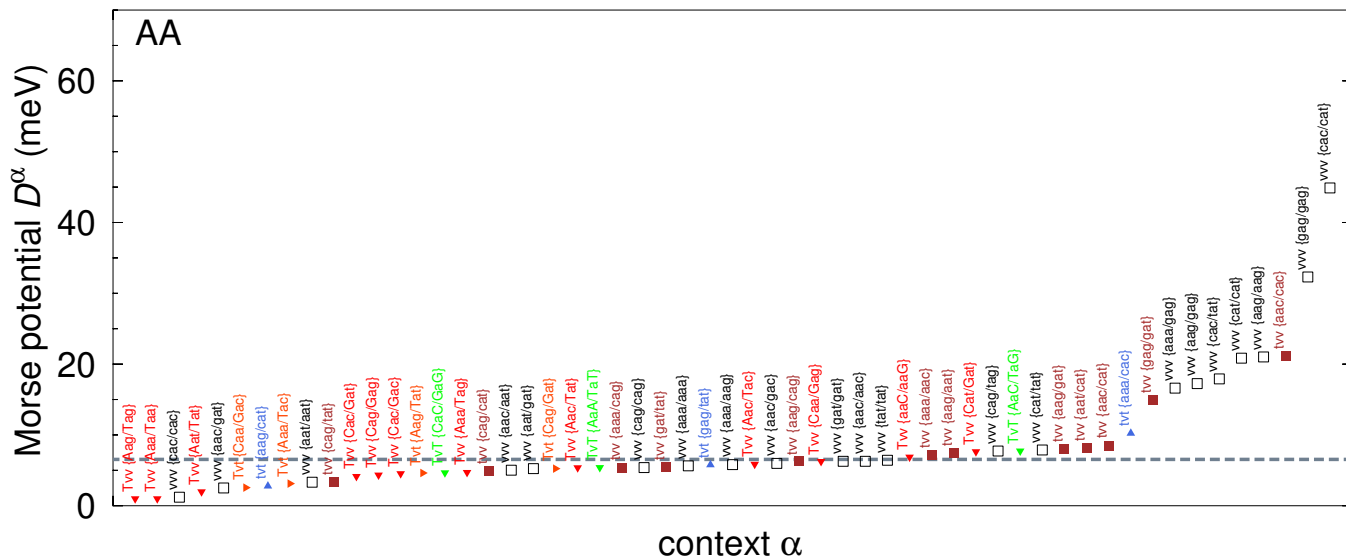


Figure S1. Context dependent Morse potentials for AA mismatches. Colour coding for the transition/transversion characteristic is as follows: vvv (black); tvv and vtv (brown); tvt and ttv (blue); Tvt, TvV and TTv (red to orange); TvT and TtT (green to lime).

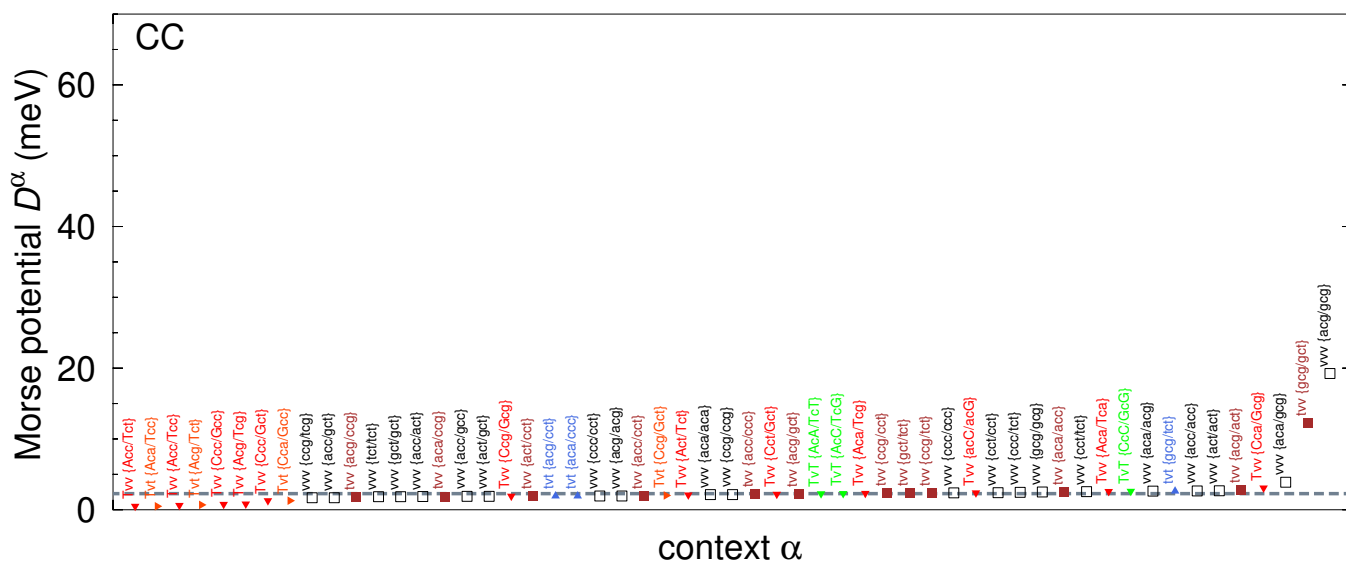


Figure S2. Context dependent Morse potentials for CC mismatches. Colour coding for the transition/transversion characteristic is the same as in Fig. S1.





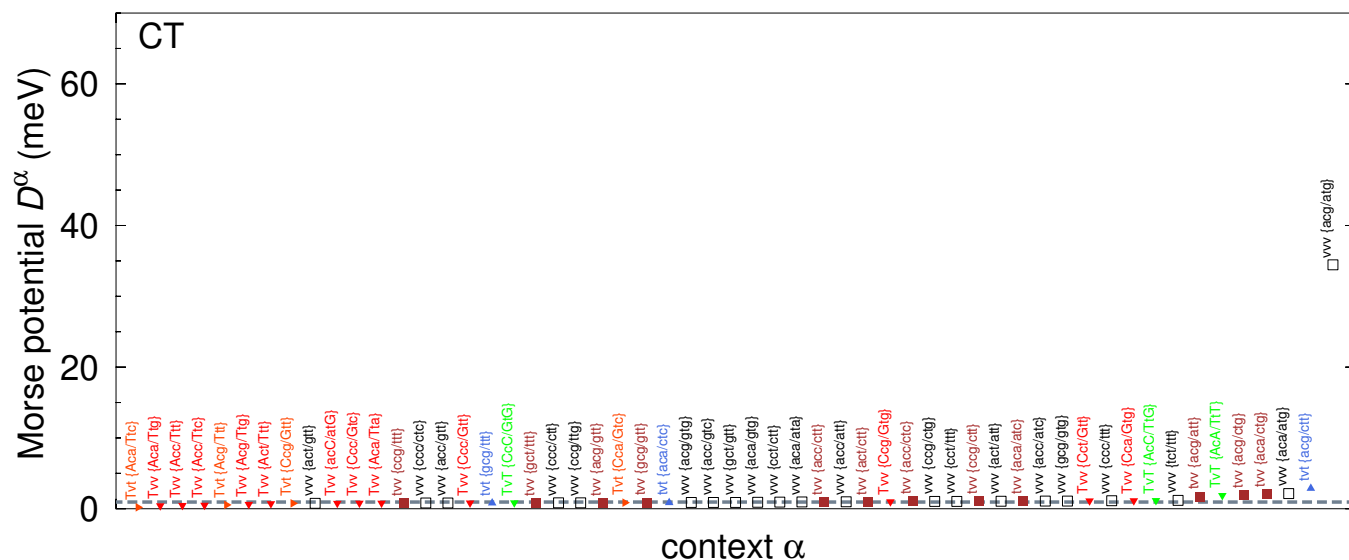


Figure S7. Context dependent Morse potentials for CT mismatches. Colour coding for the transition/transversion characteristic is the same as in Fig. S1.

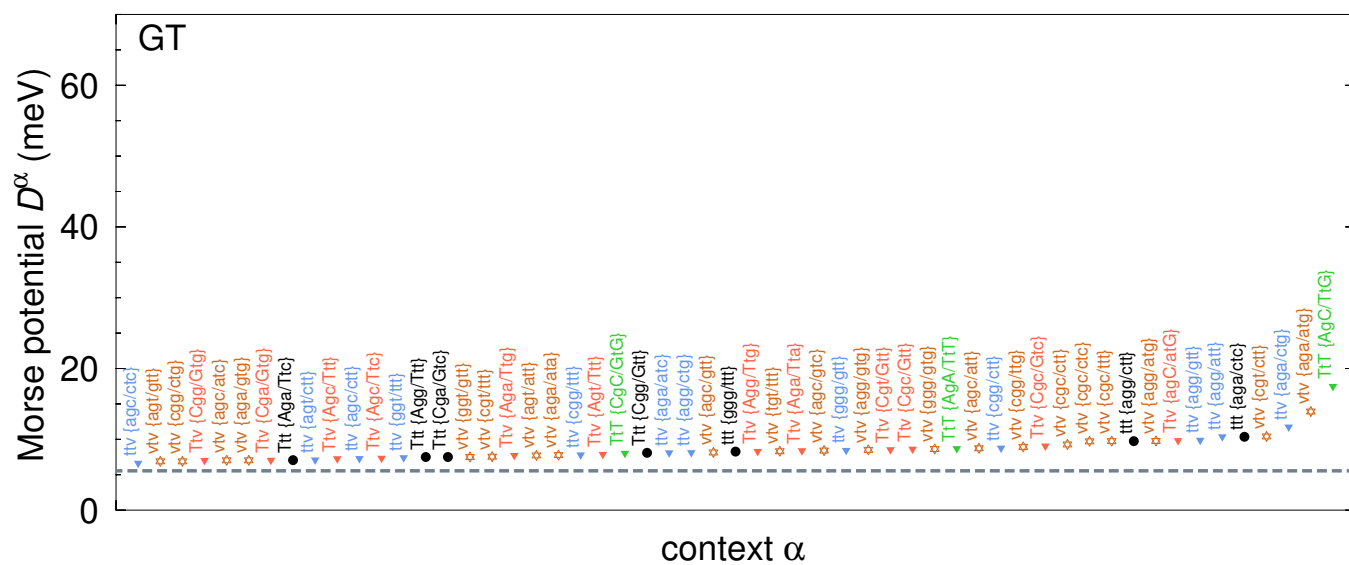


Figure S8. Context dependent Morse potentials for GT mismatches. Colour coding for the transition/transversion characteristic is the same as in Fig. S1.

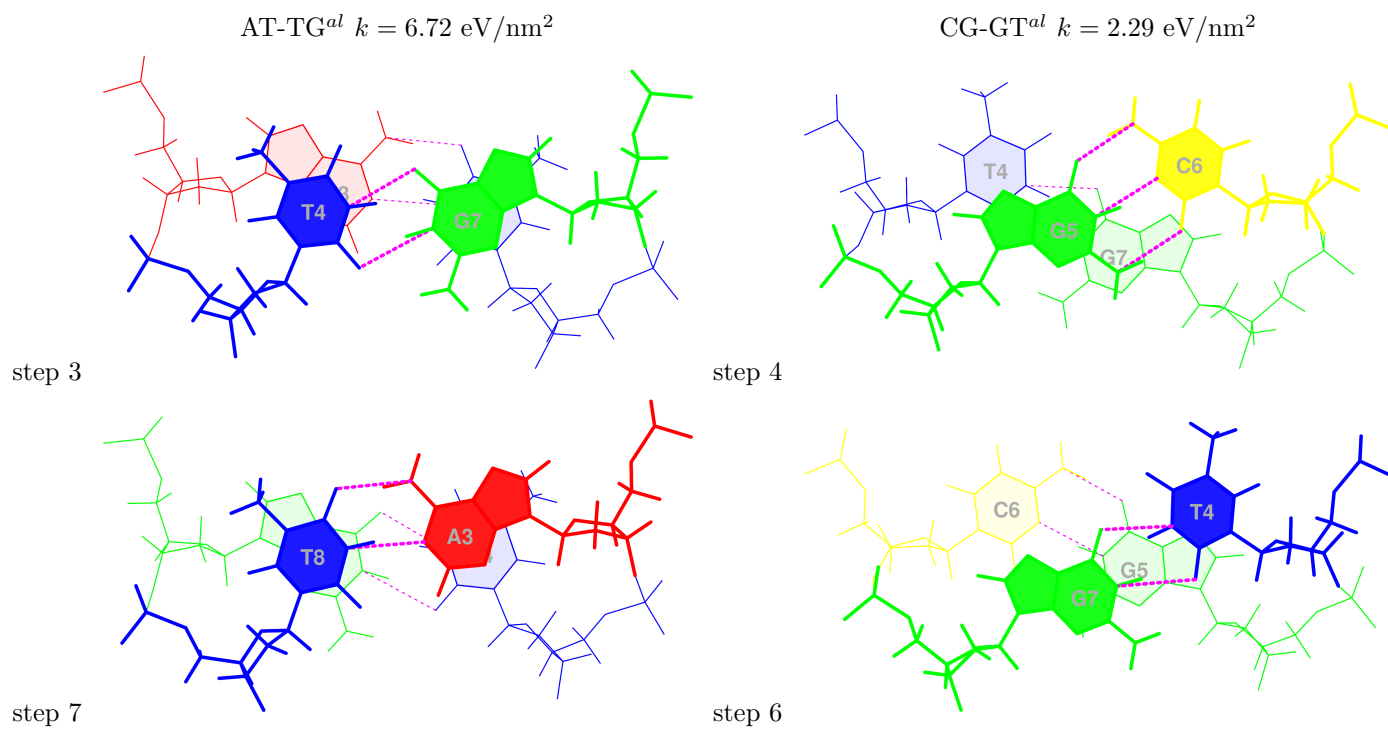


Figure S9. Structural steps for Protein Data Bank entry 1KKW [1], the sequence is 5'-CCATGCGTGG-3'/5'-GGTGC GTACC-3'. Figures generated with the Web 3DNA 2.0 tool [2].



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- [1] R. J. Isaacs, W. S. Rayens, H. P. Spielmann, Structural differences in the NOE-derived structure of GT mismatched DNA relative to normal DNA are correlated with differences in  $^{13}\text{C}$  relaxation-based internal dynamics, *J. Mol. Biol.* 319 (1) (2002) 191–207.
- [2] S. Li, W. K. Olson, X.-J. Lu, Web 3DNA 2.0 for the analysis, visualization, and modeling of 3D nucleic acid structures, *Nucleic Acids Res.* 47 (2019) W26–W34. [doi:10.1093/nar/gkz394](https://doi.org/10.1093/nar/gkz394).