

MView

[Tools \(/Tools/\)](#) > [Multiple Sequence Alignment \(/Tools/msa\)](#) > MView

Results for job mview-I20170914-024003-0501-74904496-oy

Reference sequence (1): S0
Identities normalised by aligned length.
Colored by: identity + property

```
1 [ . ] 12
1 S0      100.0%  TIPRAPSPANTY
2 S1      0.0%   HGGVRLY-----
3 S2      0.0%   GQSEKHL-----
4 S3      0.0%   SLSKWSF-----
5 S4      14.3%  KIAVIST-----
6 S5      28.6%  TDNTKPK-----
7 S6      28.6%  TNWRTIN-----
8 S7      14.3%  VSRDTPQ-----
9 S8      0.0%   SFKIPYHYDSGQ
10 S9     8.3%   NRPDSAQFWLHH
11 S10    0.0%   DSSNPIFWRPSS
12 S11    0.0%   FYRHDTYNTHHT
13 S12    8.3%   HTKQIPRHIYSA
14 S13    0.0%   HAIYPRH-----
15 S14    0.0%   LNHHLGF-----
16 S15    0.0%   CQLLSARSC---
17 S16    0.0%   SVFLPTRHSPDL
18 S17    0.0%   ATTHRDVQNAFR
19 S18    0.0%   QTNDTSRQPSYR
20 S19    14.3%  AALSMPP-----
21 S20    0.0%   HYQHNTHHPSRW
22 S21    0.0%   SHHIPSQWPLH
23 S22    0.0%   SVQLQQQ-----
24 S23    8.3%   LVSKPYSLTKGI
25 S24    8.3%   QTAGKFNSAAHP
26 S25    0.0%   HSMPYGLVSGSK
27 S26    28.6%  THHTLFS-----
28 S27    0.0%   QPWPTSI-----
29 S28    14.3%  TPTLIKG-----
30 S29    8.3%   TTVYPARWGAHP
31 S30    0.0%   CNNQMLERC---
32 S31    0.0%   GTTTWLY-----
33 S32    14.3%  LAHNRTS-----
34 S33    0.0%   ETALIAA-----
35 S34    14.3%  LPVRLDW-----
36 S35    8.3%   SWMPHPRWSPQH
37 S36    8.3%   VNTGMSRLTYM
38 S37    8.3%   SSYYPQLTAHRF
39 S38    0.0%   HTSSSVKMSDVL
40 S39    0.0%   DVQEKGHVDVLR
```

41	S40	0.0%	YPATHYL-----
42	S41	0.0%	SLHSKAYERPLS
43	S42	14.3%	QLPHTVL-----
44	S43	28.6%	ETPLQKS-----
45	S44	0.0%	LARDVQI-----
46	S45	14.3%	KLPVLYA-----
47	S46	14.3%	VNPHYLQ-----
48	S47	0.0%	QHYNIVNTQSRV
49	S48	0.0%	LPIVKAL-----
50	S49	0.0%	QSHYRHISPAQV
51	S50	0.0%	DLNYFTLSSKRE
52	S51	11.1%	CYQLNTSQC---
53	S52	0.0%	GSELYGL-----
54	S53	14.3%	QLWAPPW-----
55	S54	8.3%	YIGSQTNERYS
56	S55	16.7%	FHVNPTSPHPL
57	S56	8.3%	RADALNSHLSSP
58	S57	8.3%	LPPEELHRSRL
59	S58	0.0%	KNLNTTAMYAAS
60	S59	0.0%	NYHLTHPHILKT
61	S60	0.0%	FAIPLVP-----
62	S61	8.3%	SVSVGMKPSRP
63	S62	16.7%	GQSPHSYQPTY
64	S63	16.7%	AQPNWTSLRSLP
65	S64	0.0%	LPTPGYH-----
66	S65	8.3%	HYISPAWPTPPA
67	S66	8.3%	QHANHQAANNLR
68	S67	28.6%	TLPHTRL-----
69	S68	0.0%	GSLNESWLSKSF
70	S69	0.0%	YHKPPSPTPLPA
71	S70	14.3%	HSITKPL-----
72	S71	42.9%	GETRAPL-----
73	S72	8.3%	MPAVMSSAQVPR
74	S73	8.3%	APIHLHSKPLLH
75	S74	8.3%	ERSWTLDSALSM
76	S75	0.0%	IPLVP-----
77	S76	0.0%	STGKPYMMLTGV
78	S77	0.0%	GSHNPHL-----
79	S78	8.3%	AKALYSANAPAV
80	S79	14.3%	NHWASPR-----
81	S80	16.7%	WSPGQQLHNST
82	S81	28.6%	TTGQAWR-----
83	S82	0.0%	KPLNMTLWPHPI
84	S83	16.7%	LIPGYSTSQLS
85	S84	0.0%	STASYTR-----
86	S85	8.3%	MPAVMSSVQVPR
87	S86	14.3%	ALLTGPR-----
88	S87	0.0%	HHEPGAWLPLSP
89	S88	11.1%	CVARGAQTC---
90	S89	8.3%	ATGTNPPGSALS
91	S90	14.3%	ALHSARV-----
92	S1	0.0%	GPLWSSN-----
93	S1	14.3%	SNQWYAS-----
94	S1	8.3%	WAPGSMPTSR
95	S1	8.3%	DLQSGPMLYWAN
96	S1	0.0%	FPLLPGPHLSPQ
97	S1	8.3%	QPPSINLTLYPM
98	S1	0.0%	CPTPHSGTC---
99	S1	0.0%	AMNPRNHSDPSV
100	S1	0.0%	SVLPSMRLYTQP
101	S1	0.0%	SNALDPSRYP-
102	S1	8.3%	HKAPSPKFDWVP
103	S1	11.1%	CHHAWPRGC---
104	S1	8.3%	TNIPHVTIDAQP
105	S1	0.0%	CHSSTWRAC---
106	S1	0.0%	WPKIQNELPPGR
107	S1	14.3%	HPVDAHV-----
108	S1	42.9%	QPPRSTS-----
109	S1	11.1%	CSEWGPNVN---
110	S1	8.3%	TTAYPARWGAHP
111	S1	0.0%	GLAPRSA-----
112	S1	14.3%	SNYNLPV-----
113	S1	9.1%	GKTDPLTSAFL-
114	S1	0.0%	ILANDLTAPGPR
115	S1	0.0%	AWKSPSKLTC--
116	S1	25.0%	YPMRAPTSQARH
117	S1	8.3%	ATRAHQAPHYPP

118 S1	14.3%	TTVQQTV-----
119 S1	0.0%	WNRSPAFSGPYL
120 S1	0.0%	VSTTTTR-----
121 S1	0.0%	LPTATHMPHHT
122 S1	11.1%	CSRFNPDWC---
123 S1	0.0%	VSRHQSWHPHDL
124 S1	0.0%	LPIAKAL-----
125 S1	11.1%	CMNQHSSAC---
126 S1	0.0%	HDVKYRLTSVE-
127 S1	0.0%	CTMKNGPSC---
128 S1	11.1%	CERMWRSYC---
129 S1	8.3%	YLPLVTPSYDPG
130 S1	8.3%	LTNNANTINKSA
131 S1	0.0%	ANKLTSY-----
132 S1	16.7%	TMGFTAPRFPHY
133 S1	8.3%	TNKDRHTYPYWA
134 S1	0.0%	VASPERTSPAFP
135 S1	14.3%	THLPWQT-----
136 S1	0.0%	GPHMLQNKLR-
137 S1	0.0%	AAQTSTP-----
138 S1	8.3%	SMVYGNSLPSAL
139 S1	0.0%	SSLEPWHRTTSR
140 S1	8.3%	APQLPWSARPAV
141 S1	8.3%	SHPWNAQRELSV
142 S1	0.0%	LLADTTHHRPWT
143 S1	33.3%	SNTAAPKPNTTH
144 S1	8.3%	MHALNTNAPATW
145 S1	14.3%	TLHTGTY-----
146 S1	20.0%	AWWWNPPLAY--
147 S1	0.0%	AMSTGHNSGPSV
148 S1	0.0%	HMLNYKIRSGGP
149 S1	8.3%	QPMQTRSTQLAS
150 S1	0.0%	WALDRGA-----
151 S1	0.0%	VAKHEGVSLMRI
152 S1	25.0%	YAYEAMKPTPTP
153 S1	0.0%	RAAGSMPTPRLA
154 S1	25.0%	TPQNGPSTPMHA
155 S1	8.3%	TEQSWIQIYAR
156 S1	8.3%	NHTISQSHPTLG
157 S1	14.3%	ANNASPT-----
158 S1	0.0%	ATWSHHRSSGAL
159 S1	0.0%	HNTTPL-----
160 S1	0.0%	SPATRNHMYTQD
161 S1	0.0%	CLLNKVGQC---
162 S1	8.3%	GPYRTGQAMTAL
163 S1	0.0%	CSLHPLRHC---
164 S1	14.3%	TLSTQSV-----
165 S1	14.3%	QLFTSAS-----
166 S1	14.3%	VYPHPER-----
167 S1	28.6%	AETTAPL-----
168 S1	11.1%	CSPKSLWSC---
169 S1	11.1%	CTPQTKHRC---
170 S1	8.3%	YGPHMLQNKLR
171 S1	11.1%	CKPSDTRLC---
172 S1	8.3%	THSPGLNTPGER
173 S1	16.7%	DTPTHATNALPA
174 S1	28.6%	MQTGAPL-----
175 S1	14.3%	GSSNATT-----
176 S1	0.0%	CTASHTVTC---
177 S1	0.0%	HVIYPRH-----
178 S1	8.3%	HKAPSPKGDWAP
179 S1	8.3%	SQWHPRSASYPM
180 S1	0.0%	CKSDRTTHC---
181 S1	11.1%	CHSAKSAPC---
182 S1	16.7%	YASAGMKPSPTP
183 S1	16.7%	EHLRMHSGHYFT
184 S1	0.0%	SHSITSKFSV--
185 S1	0.0%	CCSCPQLC---
186 S1	0.0%	LDDNQDGGHTPT
187 S1	8.3%	ANYFLPPVLSSS
188 S1	8.3%	ELYTPTELAPAR
189 S1	8.3%	GTLYYSSKQHMS
190 S1	0.0%	AETTPRV-----
191 S1	0.0%	LTAETHAYILS-
192 S1	0.0%	CLSNNKGHC---
193 S1	8.3%	SNPWSAQRELSV
194 S1	0.0%	CPNLTSARC---

195 S1	0.0%	AQVTVLGSPLPT
196 S1	0.0%	APTQGSPLPRML
197 S1	0.0%	NPNEREATNTAH
198 S1	28.6%	GETPAPM-----
199 S1	0.0%	CNHSGLLRC---
200 S1	8.3%	VTSPAAPIHSAD
201 S1	9.1%	SLPASWRSMPP-
202 S1	8.3%	STLHPGRPSSHP
203 S1	8.3%	DCNDKRKPTGDG
204 S1	0.0%	KNLNTTGMYAAS
205 S1	0.0%	KFIPGTY-----
206 S1	8.3%	KMPHFTLSKVWA
207 S1	28.6%	TNPQPSL-----
208 S1	10.0%	AGTGKWQPRG--
209 S1	8.3%	YTYTSYSNSSRA
210 S1	9.1%	NKVTNGGAAQR-
211 S1	8.3%	HLQTPQPEHNNL
212 S1	16.7%	TMDATTPQVTHY
213 S1	8.3%	GMSRFNLDPTPA
214 S1	8.3%	SYSQHYGIPNPW
215 S1	14.3%	EGPPLSR-----
216 S1	0.0%	QPASDYATWPRS
217 S1	0.0%	ATTHRDVQNAFR
218 S1	0.0%	YWAATMP-----
219 S1	14.3%	HHPWRTA-----
220 S1	0.0%	GLCQSIMRERLS
221 S1	0.0%	GDRLIVP-----
222 S1	16.7%	SVSVEVKPIPTP
223 S1	25.0%	TLPAFGPRAHVL
224 S1	0.0%	QYLENNRWKVPS
225 S1	0.0%	QSLHQRL-----
226 S1	0.0%	LTLSPSA-----
227 S1	25.0%	QSANLLNPAKTM
228 S1	25.0%	YPMRAPTSQAWH
229 S1	14.3%	IVPLHLV-----
230 S1	0.0%	WVEVHYL-----
231 S1	0.0%	SPHPSSK-----
232 S1	0.0%	CLTSPMGKC---
233 S1	14.3%	GRLVPPL-----
234 S1	50.0%	AITLAP-----
235 S1	16.7%	SPNFSWLPLGTT
236 S1	14.3%	VATPAHH-----
237 S1	0.0%	QVADTTQNTTGT
238 S1	8.3%	SFKPPANHHAWY
239 S1	0.0%	SDQLLLSSANW
240 S1	0.0%	APAHPLT-----
241 S1	0.0%	AMSPRHHSGPSV
242 S1	16.7%	IPLPPSRPFFK
243 S1	0.0%	LSTHTTESRSMV
244 S1	25.0%	KPYNLYSGANQP
245 S1	0.0%	CNANSMLC---
246 S1	0.0%	CGHKNQFHC---
247 S1	16.7%	ALQRISPPQHWM
248 S1	16.7%	RAPASMP TARLA
249 S1	8.3%	ANHLNPNASRVL
250 S1	0.0%	DLNELYLRLSLRA
251 S1	28.6%	TMPNMGP-----
252 S1	0.0%	AMNPVSP-----
253 S1	8.3%	WR4PRATDVNLR
254 S1	0.0%	HEGTRSTASYPK
255 S1	16.7%	TAPPTWLQTQWA
256 S1	14.3%	AFPVSHN-----
257 S1	16.7%	CETQAPMNVCP
258 S1	0.0%	NNQLSDV-----
259 S1	11.1%	CTCRPNMNC---
260 S1	0.0%	CSKSYEYNC---
261 S1	0.0%	CASNLTAYY---
262 S1	9.1%	TTHHYGYKSGY-
263 S1	0.0%	QLSWNNRRFSI-
264 S1	8.3%	QSPVNHYYHYHI
265 S1	0.0%	LRLIGLRAPYS-
266 S1	0.0%	RLHSDRALMID-
267 S1	0.0%	CTQMR TAYC---
268 S1	14.3%	WPQKAQP-----
269 S1	12.5%	CLMRFRC-----
270 S1	8.3%	TEQSWIRILCAW
271 S1	8.3%	MWP TTTTHSSPYH

272 S1	8.3%	SSNSELWPLLSA
273 S1	8.3%	HYTADKRHAERL
274 S1	25.0%	YPMRAPTCQAWH
275 S1	0.0%	GLGASYWWR---
276 S1	0.0%	MLFYPRP-----
277 S1	16.7%	NHHHQPLARNQS
278 S1	0.0%	ETANLRLQWGH
279 S1	11.1%	CRSDPPRWC---
280 S1	0.0%	SPTSKVP-----
281 S1	8.3%	AWLTGPRALGPL
282 S1	22.2%	CWTSAHAPC---
283 S1	0.0%	CSGKWQPRC---
284 S1	0.0%	CYQKMNPQC---
285 S1	11.1%	CTSKTISAC---
286 S1	42.9%	SPFRAPT-----
287 S1	0.0%	SCSYCLKSSTD
288 S1	25.0%	YPPRAWDTPHPH
289 S1	0.0%	CYYAHDATC---
290 S1	0.0%	ARYHTHM-----
291 S1	8.3%	AWNTHGWASVTS
292 S1	0.0%	SPVWRSTTNGEA
293 S1	16.7%	GITPSMAPGQRP
294 S1	14.3%	LTPVPGQ-----
295 S1	8.3%	AWRPYQNADYTF
296 S1	0.0%	QHYNIVNTQSRV
297 S1	33.3%	CINWARSAC---
298 S1	16.7%	GSPGQQRHNST
299 S1	0.0%	QTQALYHSRQVH
300 S1	14.3%	HTNTKPL-----
301 S1	0.0%	QALSWR-----
302 S1	16.7%	TPSWTSRPMAMP
303 S1	28.6%	TSFQNL-----
304 S1	25.0%	EHPTWIAPAAPT
305 S1	14.3%	IPTLPSS-----
306 S1	8.3%	HQITQPRSLSP
307 S1	42.9%	DETRAPL-----
308 S1	0.0%	AGDTTHGIPC--
309 S1	16.7%	KQLTSPPLNPV
310 S1	16.7%	RSPEQQRHMNST
311 S1	25.0%	TMMQPMAGPG
312 S1	0.0%	SYTTSLK-----
313 S1	0.0%	KVITIWQ-----
314 S1	0.0%	GLQARHI-----
315 S1	0.0%	MPKYLLQ-----
316 S1	0.0%	WHISPLTHTSLV
317 S1	0.0%	CDSHKRLK---
318 S1	8.3%	TEQHW1KNIYAR
319 S1	0.0%	DGTIGLR-----
320 S1	16.7%	TKTYPPRGAQS
321 S1	28.6%	AAPRPYR-----
322 S1	25.0%	TPIGNKSPKSHA
323 S1	0.0%	NATLQSWVRDAR
324 S1	0.0%	NQDVPLF-----
325 S1	28.6%	SAPLASF-----
326 S1	8.3%	EANSLAPLAPIW
327 S1	0.0%	HAIYPRQ-----
328 S1	0.0%	LPSQMYLGPDRS
329 S1	22.2%	CQKGHPSSC---
330 S1	0.0%	CWTRTVAC---
331 S1	0.0%	GSHDWKR-----
332 S1	16.7%	AWKPQPSQFSAS
333 S1	0.0%	QPELPTRLRLSL
334 S1	0.0%	CMSTMRRSC---
335 S1	0.0%	CVKSHAGTC---
336 S1	25.0%	ALPNPPWTSHTA
337 S1	0.0%	NMHKELT-----
338 S1	16.7%	AWPPPSMPLAY
339 S1	25.0%	THPLHTNLPTS
340 S1	16.7%	TKNMLSLPDCPG
341 S1	8.3%	HSGNIHQPLRSM
342 S1	0.0%	GWSSYRG-----
343 S1	0.0%	SVCGMKPSRP-
344 S1	8.3%	LLPDRNNAYSDT
345 S1	8.3%	YYPASSTIQSRP
346 S1	18.2%	NLTIASYPSW-
347 S1	41.7%	TIPRITTPTSWV
348 S1	0.0%	HPSLHALQGDHV

349 S1	14.3%	TFINPSH-----
350 S1	0.0%	HGLPVTTTRGAFG
351 S1	16.7%	WPSSYLSPIPIYS
352 S1	16.7%	HIWSRPMFYSPA
353 S1	0.0%	CSCSNTKWC---
354 S1	28.6%	TWPHSIG-----
355 S1	25.0%	SGMSAPYTTVTA
356 S1	8.3%	HWDPFSL SAYFP
357 S1	8.3%	HHLRTDMRWAT
358 S1	8.3%	TPLGPILRNAHS
359 S1	8.3%	YYPAGSTIQSRP
360 S1	8.3%	LPPWKHKTSGVA
361 S1	0.0%	DMKSTIPAPGG
362 S1	8.3%	TLNMHKLHLPDS
363 S1	0.0%	CPSTLRAQC---
364 S1	42.9%	AETRAPL-----
365 S1	9.1%	ADYRSSVGGGK-
366 S1	28.6%	MPTMASS-----
367 S1	0.0%	HNMVPSLLSTSK
368 S1	28.6%	EETSAPL-----
369 S1	0.0%	DMVQTSTRRLAL
370 S1	0.0%	CTNNHANIC---
371 S1	0.0%	SDTISRHLVSMT
372 S1	8.3%	HSIHSALTALAG
373 S1	0.0%	HLFPQSNYGGHS
374 S1	0.0%	FGNSDKLQTRAF
375 S1	0.0%	RPLPPTP-----
376 S1	8.3%	APTPRVAPLPVG
377 S1	8.3%	SWPLYSRDSGLG
378 S1	0.0%	MPLQRTL-----
379 S1	8.3%	WTVQPTMLPMM
380 S1	11.1%	CIRMDGQKC---
381 S1	0.0%	VRDSVTVNSRHS
382 S1	42.9%	SPFRAPP-----
383 S1	8.3%	APPTSQAGDGV
384 S1	0.0%	LPSAPRP-----
385 S1	8.3%	YWAQSSNGAARL
386 S1	0.0%	VYKPPGG-----
387 S1	8.3%	TNTSWMTAMTPF
388 S1	0.0%	ARQTTATTTCGC
389 S1	0.0%	QPRPTSI-----
390 S1	42.9%	TSSKAMS-----
391 S1	0.0%	WPTLPYT-----
392 S1	0.0%	DCKPTTPTH---
393 S1	8.3%	DAADPPHVLTLT
394 S1	8.3%	AFATSYSNLHDT
395 S1	16.7%	GGLLAV-----
396 S1	0.0%	CLTDVGRAC---
397 S1	16.7%	AQAKYWSYTKTT
398 S1	16.7%	HPNQADLPPGGL
399 S1	0.0%	RALMDMPAHRHA
400 S1	16.7%	TSVTMSSNEAWM
401 S1	11.1%	CYALKPPEC---
402 S1	8.3%	QLSGMLEWQNLR
403 S1	0.0%	CPDPTTRLC---
404 S1	0.0%	LPRDLHATPQQI
405 S1	0.0%	CDLPTSRIC---
406 S1	0.0%	YHHNPYYQGAHD
407 S1	0.0%	CLLDDLKRC---
408 S1	50.0%	AIPSPV-----
409 S1	14.3%	KIIPETY-----
410 S1	8.3%	TTMFSTQSQKVP
411 S1	0.0%	MNDHKTPNSSLR
412 S1	28.6%	VPPLLPL-----
413 S1	25.0%	ELKLTSAPAHTR
414 S1	0.0%	FMKSPIPAPGG
415 S1	8.3%	APIHLHSEPLLH
416 S1	0.0%	CYGSTHHQC---
417 S1	14.3%	EPHRTTW-----
418 S1	0.0%	GNTPSRA-----
419 S1	8.3%	HPPTHNTAPWHA
420 S1	0.0%	HDTYTAH-----
421 S1	8.3%	TVSINLPTSTMR
422 S1	16.7%	HSTKANSMLTIA
423 S1	16.7%	DGTRAQDAGGRP
424 S1	8.3%	YTPQKKIERAFG
425 S1	8.3%	NPFNQHLHAQHP

426 S1	8.3%	DHHSSTCRASAG
427 S1	8.3%	HPHQASGWTSP
428 S1	8.3%	WPTNAAHSLYRL
429 S1	16.7%	SDSAGMKPSPTP
430 S1	14.3%	GGVDAEW-----
431 S1	0.0%	YERPLHRLSSID
432 S1	0.0%	SSSDNHLAQLHT
433 S1	28.6%	TYAQLPI-----
434 S1	8.3%	DSGYHRAPRPWP
435 S1	0.0%	HDEGRRG-----
436 S1	0.0%	SAHGTSTGVWP
437 S1	14.3%	ALHSARE-----
438 S1	8.3%	MDNQDGMNACAG
439 S1	0.0%	RPSSYMYAIPYR
440 S1	0.0%	STMPKFN-----
441 S1	8.3%	TVKAGWPYEDVP
442 S1	0.0%	SHALPMTWSTAA
443 S1	8.3%	AADYRSSVGGGK
444 S1	14.3%	VLPWYSP-----
445 S1	11.1%	CTDGPESSEC---
446 S1	16.7%	QRLIQDSVALWP
447 S1	42.9%	AGPLQPS-----
448 S1	0.0%	SMVYGNRLLPSAL
449 S1	0.0%	WPLGDYP-----
450 S1	0.0%	CKHFRTMSC---
451 S1	8.3%	HQITQPTSLLS
452 S1	28.6%	TKTAASF-----
453 S1	42.9%	GETRAPV-----
454 S1	0.0%	DARHQSWHPHDL
455 S1	8.3%	LQPGHSVHNFSK
456 S1	0.0%	CMWLSQRAC---
457 S1	0.0%	GGSLVAKATAPN
458 S1	11.1%	CPGVHRSTC---
459 S1	0.0%	CFLPDGVRC---
460 S1	0.0%	LPVSKSVTQSHT
461 S1	0.0%	NRAATMP-----
462 S1	0.0%	QPHLTNPGPRHL
463 S1	25.0%	MDAKNPLGPTY
464 S1	10.0%	YVSAGMKPSP--
465 S1	0.0%	KLQTYNPHFRNP
466 S1	8.3%	SGLPHLSLNAPR
467 S1	8.3%	MHRSDLMSAAVR
468 S1	8.3%	DLIKYPPVTAWS
469 S1	0.0%	STYTNRA-----
470 S1	0.0%	HGHPYQHLLRVL
471 S1	0.0%	VPAPPAHQKLAK
472 S1	0.0%	STWSHHLSSAGL
473 S1	11.1%	CTHSKSSQC---
474 S1	16.7%	QGYRPILPSHFL
475 S1	8.3%	VPPINAVQVPFP
476 S1	8.3%	WTSKDVSILSPA
477 S1	8.3%	TPHKPLTSSSGP
478 S1	8.3%	TPAAPYATFGAP
479 S1	0.0%	ESLHQRL-----
480 S1	0.0%	IDNHMQL-----
481 S1	0.0%	CLDKPRFLC---
482 S1	0.0%	CNMNRYNTC---
483 S1	0.0%	CSSQYRPYC---
484 S1	8.3%	APRLPQSLLPQL
485 S1	14.3%	TRVQLLH-----
486 S1	14.3%	MPMVPPK-----
487 S1	8.3%	TPGNSFLDHMKQ
488 S1	8.3%	GLPKNMFWDASS
489 S1	25.0%	TAAVDMPRSTP
490 S1	0.0%	GLQGRHI-----
491 S1	0.0%	YLTMPTP-----
492 S1	11.1%	CQHGRSSYC---
493 S1	14.3%	TQYFYLP-----
494 S1	14.3%	TFLNSLV-----
495 S1	8.3%	STSKLTDLFSY
496 S1	0.0%	AQDVTKNGLRRW
497 S1	0.0%	ATGHPVWHHSS
498 S1	28.6%	GETHAPL-----
499 S1	0.0%	GMWFSGL-----
500 S1	16.7%	LIAHSMPPRTRI
501 S1	42.9%	GGTRAPL-----
502 S1	0.0%	SPAANGPQPRPL

503 S1	16.7%	NAHLHITPRSTL
504 S1	0.0%	NPSSKQILSQVP
505 S1	0.0%	KVLHSDRALMID
506 S1	0.0%	CPLSSHPGC---
507 S1	16.7%	QPSKHISEARGF
508 S1	25.0%	SSKIQVSPATVP
509 S1	8.3%	ADWHRTSTSPMS
510 S1	0.0%	EYSLYRILHMDE
511 S1	8.3%	GDTNPNPGKRSQI
512 S1	0.0%	ALQHQRAFQHQR
513 S1	0.0%	HPMADHR-----
514 S1	41.7%	TQANAFSPAPRV
515 S1	28.6%	GITSAAT-----
516 S1	0.0%	CQSVPSDRC---
517 S1	0.0%	QAHLEKTAVPRM
518 S1	0.0%	HATPQKPLHSRM
519 S1	0.0%	CLSLKYQSC---
520 S1	25.0%	YPTRAPTSQAWH
521 S1	42.9%	WETRAPL-----
522 S1	0.0%	NEHKDARSPHSP
523 S1	0.0%	ITMPWHDTERS
524 S1	0.0%	AKHVTAPHIREV
525 S1	11.1%	CNWLRTPC---
526 S1	8.3%	GTLQLHNTHNST
527 S1	0.0%	CHWPMSASC---
528 S1	8.3%	QDALLAAPVISK
529 S1	8.3%	YHMPPSATPLTA
530 S1	0.0%	CHSGRSEHC---
531 S1	0.0%	WLKDSRAAWIRH
532 S1	16.7%	AILRPQLMPGSS
533 S1	0.0%	CGRINYGTC---
534 S1	14.3%	GSPRTP-----
535 S1	8.3%	SHSLALLDSVAS
536 S1	0.0%	CTQAFLPFC---
537 S1	11.1%	CLPMNNALC---
538 S1	0.0%	LDYHQAWGHTRA
539 S1	25.0%	FGIHAKYPSPIY
540 S1	0.0%	IPNDLNPRQLRG
541 S1	0.0%	DQRDYHYGRGGT
542 S1	0.0%	CLSNNIVKHC--
543 S1	8.3%	NMFGSLTSHVTA
544 S1	16.7%	YWPRPDDSFWRP
545 S1	0.0%	CTKTQLHVC---
546 S1	8.3%	MNVLSSSASTES
547 S11	11.1%	CELRGDGWC---
548 S12	9.1%	GCHSSTWRACG-
549 S13	18.2%	GCPTPHSGTCG-
550 S14	18.2%	GCMNQHSSACG-
551 S15	0.0%	GCDSHKRLKCG-
552 S16	0.0%	CPDLHHHMC---
553 S17	0.0%	CLGQHAFTC---
554 S18	25.0%	SSNTAPHC----
555 S19	0.0%	CHVLPNGNC---
556 S20	22.2%	CKPQYPLSC---
557 S21	0.0%	CQTARTPAC---
558 S22	11.1%	CNQSQPKHC---
559 S23	22.2%	CTPSKISVC---
560 S24	11.1%	CVSPGPRLC---
561 S25	11.1%	CYALSGVPC---
562 S26	0.0%	CKHPPQPFPC---
563 S27	11.1%	CHQSKPLLCC---
564 S28	0.0%	CPGPFSNWC---
565 S29	11.1%	CPHKTHLPC---
566 S30	0.0%	CVFPLSHYC---
567 S31	33.3%	CNNIAPSSC---
568 S32	0.0%	CTLGMQFQC---
569 S33	0.0%	CTNPTGMLC---
570 S34	22.2%	CSNMAPRSC---
571 S35	0.0%	CSMAPNMSC---
572 S36	0.0%	CSDLTMEAC---
573 S37	0.0%	CPWPYKYSC---
574 S38	0.0%	CFGGNFHRC---
575 S39	0.0%	CLTTSQQTC---
576 S40	11.1%	CTANSQSFC---
577 S14	0.0%	CQEPLDESC---
578 S42	0.0%	CQMSMFARC---
579 S43	0.0%	CPLTPKAYC---

580	S44	0.0%	CNNSHTALC---
581	S45	0.0%	CLSSDITLC---
582	S46	11.1%	CLTHGPKYC---
583	S47	0.0%	CLGKDLRTC---
584	S48	11.1%	CAPKTHPLC---
585	S49	0.0%	CPTGLMKYC---
586	S50	22.2%	CTWKAPLQC---
587	S51	0.0%	CSHILGPSC---
588	S52	0.0%	CLSTSQYSC---
589	S53	11.1%	CGNSNPKSC---
590	S54	16.7%	YCPRYVRRKLEN
591	S55	0.0%	NGYEIEWYSWVT
592	S56	0.0%	CNGYEIEWYSWV
593	S57	0.0%	YLTMPPTP-----
594	S58	0.0%	WPTPPYA-----
595	S59	28.6%	TPHNTVS-----
596	S60	14.3%	SLPAHAR-----
597	S61	0.0%	HSSLQTP-----
598	S62	14.3%	YSIPKSS-----
599	S63	0.0%	ALQPRYL-----
600	S64	0.0%	GREVD-----
	consensus/100%	
	consensus/90%	
	consensus/80%		t.....
	consensus/70%		t.....