

### piRNA Clusters

Cluster Number	piRNA Id	Repeat elements	Chromosomal location	No. of piRNAs
Cluster1	piR-hsa-7193 piR-hsa-27619 piR-hsa-27620 piR-hsa-27622 piR-hsa-23327 piR-hsa-1243 piR-hsa-23619 piR-hsa-31237 piR-hsa-31238	tRNA-lys tRNA-lys tRNA-lys tRNA-lys tRNA-lys tRNA-lys tRNA-lys tRNA-lys tRNA-lys	Chromosome 1	9
Cluster2	piR-hsa-24683 (2) piR-hsa-24684 (2) piR-hsa-23330 (2) piR-hsa-23656 (2) piR-hsa-6144 (2) piR-hsa-6145 (2)	tRNA-val tRNA-val tRNA-val tRNA-val tRNA-val tRNA-val	Chromosome 5	12
Cluster3	piR-hsa-23655 piR-hsa-28877 piR-hsa-28876 piR-hsa-7201	tRNA-val tRNA-val tRNA-val tRNA-Thr	Chromosome 5	4
Cluster4	piR-hsa-32170 piR-hsa-28590 piR-hsa-3616 piR-hsa-5067 piR-hsa-23679 piR-hsa-27400 piR-hsa-28116 piR-hsa-13893	tRNA-ser tRNA-ser tRNA-Arg  tRNA-iMet tRNA-iMet tRNA-iMet	Chromosome 6	8
Cluster5	piR-hsa-23679 piR-hsa-27400 piR-hsa-28116 piR-hsa-13893 piR-hsa-27140 piR-hsa-27139	tRNA-iMet tRNA-iMet tRNA-iMet tRNA-iMet tRNA-lys tRNA-lys	Chromosome 6	6
Cluster6	piR-hsa-28319 (2) piR-hsa-28318 (2)	SNORD 62A SNORD 62B	Chromosome 9	4
Cluster7	piR-hsa-7201 piR-hsa-6839 piR-hsa-4947 piR-hsa-6840	tRNA-Thr tRNA-Tyr tRNA-Tyr	Chromosome 14	4
Cluster8	piR-hsa-21131 (3) piR-hsa-32184 (2) piR-hsa-32207 (2) piR-hsa-32221 (2) piR-hsa-32175 (2) piR-hsa-32174 (2) piR-hsa-32168 (2)	7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A		31

	piR-hsa-32185 (2) piR-hsa-32194 (1) piR-hsa-32154 (1) piR-hsa-32201 (1) piR-hsa-32641 (1) piR-hsa-32591 (1) piR-hsa-32252 (1) piR-hsa-11817 (1) piR-hsa-32658 (1) piR-hsa-32745 (1) piR-hsa-32280 (1) piR-hsa-32213 (1) piR-hsa-32177 (1) piR-hsa-32181 (1) piR-hsa-32184 (2) piR-hsa-32192 (1) piR-hsa-32185 (2)	7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 8SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A 7SLRNA-SINE/A	Chromosome 14	
Cluster9	piR-hsa-25783 (4) piR-hsa-25782 (4) piR-hsa-18709 (4) piR-hsa-2107 (4) piR-hsa-25781 (4) piR-hsa-25780 (4) piR-hsa-2106 (4) piR-hsa-12790 (4) piR-hsa-25779 (4) piR-hsa-1207 (3) piR-hsa-28131 (1)	tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly tRNA-Gly	Chromosome 16	40
Cluster10	piR-hsa-28394 (2) piR-hsa-28398 (2) piR-hsa-28397 (2)	tRNA-Cys tRNA-Cys tRNA-Cys	Chromosome 17	6
Cluster11	piR-hsa-27283 piR-hsa-17444 piR-hsa-28019	SNORD110 SNORD57 SNORD57	Chromosome 20	3
Cluster12	piR-hsa-28646 piR-hsa-1873 piR-hsa-1872 piR-hsa-12454 piR-hsa-182 piR-hsa-12525 piR-hsa-1191 piR-hsa-12719 piR-hsa-9010 piR-hsa-28478 piR-hsa-26747 piR-hsa-1077 piR-hsa-26754 piR-hsa-26946 piR-hsa-1336 piR-hsa-28212	LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA	Chromosome 21	25

	piR-hsa-1043 piR-hsa-3645 piR-hsa-2117 piR-hsa-25786 piR-hsa-20613 piR-hsa-11080 piR-hsa-1219 piR-hsa-28382 piR-hsa-25046	LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA		
Cluster13	piR-hsa-28646 piR-hsa-1873 piR-hsa-1872 piR-hsa-12454 piR-hsa-182 piR-hsa-12525 piR-hsa-1191 piR-hsa-12719 piR-hsa-9010 piR-hsa-28478 piR-hsa-26747 piR-hsa-1077 piR-hsa-26754 piR-hsa-26946 piR-hsa-1336 piR-hsa-28212 piR-hsa-1043 piR-hsa-3645 piR-hsa-2117 piR-hsa-25786 piR-hsa-20613 piR-hsa-11080 piR-hsa-1219 piR-hsa-28392 piR-hsa-25046	LSU-rRNA tRNA-Ala LSU-rRNA	Chromosome 21	25
Cluster14	piR-hsa-1872 piR-hsa-1873 piR-hsa-12454 piR-hsa-182 piR-hsa-12525 piR-hsa-1191 piR-hsa-12719 piR-hsa-9010 piR-hsa-28478 piR-hsa-26747 piR-hsa-1077 piR-hsa-26754 piR-hsa-26946 piR-hsa-1336 piR-hsa-28212 piR-hsa-1043	LSU-rRNA LSU-rRNA	Chromosome 21	24

	piR-hsa-3645 piR-hsa-2117 piR-hsa-25786 piR-hsa-20613 piR-hsa-11080 piR-hsa-1219 piR-hsa-28382 piR-hsa-25046	LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA tRNA-Ala LSU-rRNA		
Cluster15	piR-hsa-28850 piR-hsa-28849 piR-hsa-28848 piR-hsa-3961 piR-hsa-952	SNORD83B SNORD83B SNORD83B SNORD83B SNORD43	Chromosome 22	5
Cluster16 (mitochondrial cluster)	piR-hsa-28875 piR-hsa-1849 piR-hsa-27007 piR-hsa-12487 piR-hsa-12488 piR-hsa-27731 piR-hsa-23919 piR-hsa-2154 piR-hsa-2155 piR-hsa-1847 piR-hsa-28841 piR-hsa-21622 piR-hsa-9491 piR-hsa-26681 piR-hsa-26685 piR-hsa-26686 piR-hsa-15022 piR-hsa-15023 piR-hsa-20266	NO MATCHES	Mitochondrial chromosome	19
Cluster17	piR-hsa-1872 piR-hsa-1873 piR-hsa-12454 piR-hsa-182 piR-hsa-12525 piR-hsa-1191 piR-hsa-12719 piR-hsa-9010 piR-hsa-28478 piR-hsa-26747 piR-hsa-1077 piR-hsa-26754 piR-hsa-26946 piR-hsa-1336 piR-hsa-28212 piR-hsa-1043 piR-hsa-3645 piR-hsa-2117	LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA	Unplaced genomic scaffold	24

	piR-hsa-25786 piR-hsa-20613 piR-hsa-11080 piR-hsa-1219 piR-hsa-28382 piR-hsa-25046	LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA tRNA-Ala LSU-rRNA		
Cluster18	piR-hsa-1872 piR-hsa-1873 piR-hsa-12454 piR-hsa-182 piR-hsa-12525 piR-hsa-1191 piR-hsa-12719 piR-hsa-9010 piR-hsa-28478 piR-hsa-26747 piR-hsa-1077 piR-hsa-26754 piR-hsa-26946 piR-hsa-1336 piR-hsa-28212 piR-hsa-1043 piR-hsa-3645 piR-hsa-2117 piR-hsa-25786 piR-hsa-20613 piR-hsa-11080 piR-hsa-1219 piR-hsa-28382 piR-hsa-25046	LSU-rRNA tRNA-Ala LSU-rRNA	Unlocalised genomic scaffold	24
Cluster19	piR-hsa-28646 piR-hsa-1872 piR-hsa-1873 piR-hsa-12454 piR-hsa-182 piR-hsa-12525 piR-hsa-1191 piR-hsa-12719 piR-hsa-9010 piR-hsa-28478 piR-hsa-26747 piR-hsa-1077 piR-hsa-26754 piR-hsa-26946 piR-hsa-1336 piR-hsa-28212 piR-hsa-1043 piR-hsa-3645 piR-hsa-2117	LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA	Chromosome 21_genomic patch	25

	piR-hsa-25786 piR-hsa-20613 piR-hsa-11080 piR-hsa-1219 piR-hsa-28382 piR-hsa-25046	LSU-rRNA LSU-rRNA LSU-rRNA LSU-rRNA tRNA-Ala LSU-rRNA		
Cluster20	piR-hsa-1873 piR-hsa-1872 piR-hsa-12454 piR-hsa-182 piR-hsa-12525 piR-hsa-1191 piR-hsa-12719 piR-hsa-9010 piR-hsa-28478 piR-hsa-26747 piR-hsa-1077 piR-hsa-26754 piR-hsa-26946 piR-hsa-1336 piR-hsa-28212 piR-hsa-1043 piR-hsa-3645 piR-hsa-2117 piR-hsa-25786 piR-hsa-20613 piR-hsa-11080 piR-hsa-1219 piR-hsa-28382 piR-hsa-25046	LSU-rRNA tRNA-Ala LSU-rRNA	Chromosome 21_genomic patch	24