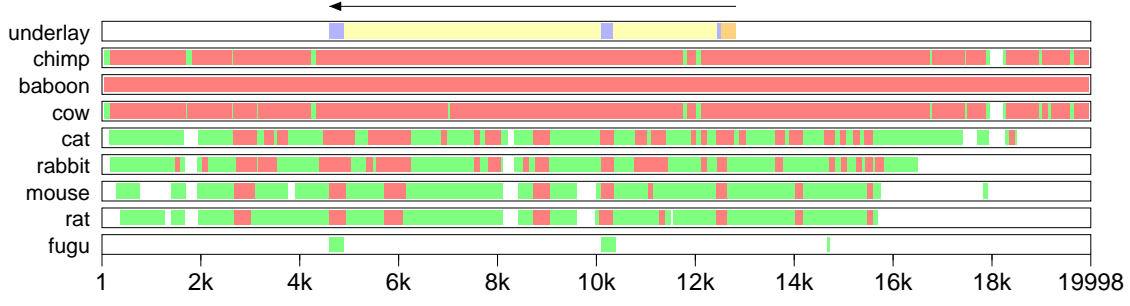


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	10	20	30	40	50	
1:	GTCCCGGCTACTGAGACTGAGGTGGGAGGATTGCTTGAGCCAGGAGGTC					human
3:	. . . A . . . . . G . . . . . C . . . . .					chimp
3:	. . . . .					baboon
3:	. . . A . . . . . C . . . . .					cow
	60	70	80	96		
51:	CAGGCTCTAGTGAGCCGAGATTGTGCCACCGCACTC----CAGCCTGGGT					human
51:	. . . . . GC . . . . . C . . . . . A . ACTG . . . . .					chimp
51:	. . . . .					baboon
51:	. . . . . GC . . . . . C . . . . . G . ACTG . . . . .					cow
	106	116	126	136		
97:	AACAAAGCGAGACCCTGTCTCAAAAAAAAA-----AAAAAAAAA					human
101:	. . . . . T . . . . . A . . C . C . C . CACACACACA . . T . . T . .					chimp
97:	. . . . .					baboon
101:	. . . . . T . . . . . A . . C . C . . . . --AAATAAT . . T . . T . .					cow
	146	156	166	176	186	
137:	AAAAAGGGCTCTCCAGATCTGGCTGGGACTCAAATTTCAAATTTTCAGCC					human
151:	. T . . . . . A . . . . .					chimp
137:	. . . . .					baboon
148:	. T . . . . . A . . . . .					cow
11:	. . . . . --A . . . . . --G . . . . .					cat
19:	. . . . . CAA . . . . . CCC-----G . . T . .					rabbit
	196	206	216	226	235	
187:	TCAGTTCCTATTAAATCTCAGTCTTGAACCTCACCCTAGAGTTCTTGT-A					human
192:	. . . . . C . . . . . C . . . . .					chimp
187:	. T . . . . . C . . . . . C . . . . .					baboon
189:	. . . . . C . . . . .					cow
38:	. . . CC . . . . . C . . . . . TA . . . . . C . . . . . C . . . . .					cat
39:	. -G . C . . . . . G -G . C . . . . . C . . G . G . G . . C . . CC . CC . C .					rabbit
	245	255	265	275	285	
236:	TCCCTCAACTTTATGATACACTTCCTGCTCCAATATCTGTCTTTGTCTTG					human
241:	. T . . . . . C . . . . .					chimp
236:	. T . . . . .					baboon
238:	. T . . . . . C . . . . .					cow
88:	. T . . . . . -- . . . . . GTT . . T . . . . . G . . . . . T . . . . . G . C . G . A					cat
87:	. T . . . . . GTT . CT . A . . . . . G . . . . . T . . . . .					rabbit
5:	. . . . . A					mouse
	295	305	314	324	334	
286:	AAGTCCCTTCATCCTGGAAAGTG-CTTTCATATCTCAACCATGGGAAAT					human
291:	. . . . . C . . . . .					chimp
286:	. . . . . A . . . . . C . . . . .					baboon
288:	. . . . . C . . . . .					cow
136:	T . . T . . . . . CA-T . . . . . C . C . . . . .					cat
129:	----- . . . . . A . . . . . CAAT . . T . CC . . . . . T . . . . . G .					rabbit
12:	C . T . . . A . . A . . T . . A . GG . CA-----C . . . . . T . . . . .					mouse

```

          344           352           362
          |           |           |
335: CTTTTATCTCCAGCTC--AAACACCCAGTTCTTTTTATG-----
340: .....--.....T-----
335: .....A-----
337: .....T-----
185: .....G-----
166: .....TG.C--.....AAAAG.....
51: ..C.....C..TGT.GGTTT..T.G.G.G.G.G..TGTGTGTGTGT

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse

```

                                375           385
                                |           |
372: -----ATACAACCATTATC
377: -----
373: -----
374: -----
220: -----C.....T..C..
201: -----CC..G..T.....
101: GTGTGTGTGTGTGTGTGTGTGTGTGTGTATGTGTGTG.G.G.TAT.....
3: .....

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          394           404           414           424           430
          |           |           |           |           |
386: TCCTC-AGCTAACTGGCCCTGTGGCTGATTATGTTATTATAACC----ACA
391: .....A.....G.....
387: .....
388: .....A.....G.....
234: .....TG.....T.....T.TC.....G..CCCGG.C
215: .....G.GG.....C....CG.GT.TC.CCG.C..T----C.T
151: ..C.-....TG.ATA..-----...CT..GG..G..-----T
6: ...C.-....T..A.A..-----...CTC.GG.G.G..-----T

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

                                LINE2
                                ----->
                                443           453           463           473
                                |           |           |           |
431: T-AGCATT-----GCCTGCGCTTGC AATTGTATTACTCTTTTCTCCTTGA
436: .....T.....A..G.....
432: .....T.....A.....
433: .....T.....A..G.....
284: -.G.A.C.TGCCGA..T...C..TG.C.T.G.CT.A..G..C..C...
259: -.C---CGT.TT...T..TGCGGCC..GGTA..GGG...C..C
186: .GG..GAG-----T..T...T.C..-C.G...CAGCA..ATTC...
41: -.G.T.CA-----TG.T...CC..-AGGC..CACCA...TTC.A.

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

                                LINE2
                                ----->
                                483           493           503           519
                                |           |           |           |
474: CTAAAATTTAGTTTCTTATGGTCAGGGGCTGCTTTGTTT----TATTCTT
479: .....
475: .....
476: .....
333: .G...C..CA.....G..C...A..T...C.C-----
305: TGG...C.....C.G.....C...GG..C-----
229: ...C..G.....C.C.C...GT.TA..TT...T...-CCA...A.
83: .....G.....C.G.....T.CA.CTT...T..CCCCA.....A.

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

LINE2

528 538 548 558 568  
 520: TTCCACAT-TGATTTAGTACCAAAACTGATGCCTTTCCCAAAGTAATTCC human  
 525: .....C-.....G.....G.....G..... chimp  
 521: .....-..... baboon  
 522: .....C-.....C.....TG..... cow  
 379: .....A...C.....TC...ACTGCAT.....G...T..... cat  
 351: .C.....C...C..TA...C.C.ACAC...A...A.....G..... rabbit  
 278: ..TATT..C...C.CT...TCCC.---..TG.....GG.-.G.--- mouse  
 133: ..T.TT..C...C.C...TCCC.--A...TG.....C.G.G.G.--- rat

LINE2

578 588 598 608 618  
 569: TTAATAAAAATAACTGTTGAACCAAAGTTAGTCCCAAATACAAGAACAGA human  
 574: .....T..T...C..... chimp  
 570: ..... baboon  
 571: .....TG.T...C..... cow  
 429: .....----..T.CA.....T.C.C.....A.T.GC..TTA---GCT cat  
 401: .....GG.T..C...C...G...T...A...ACTC.G.TC...G.T rabbit  
 321: ..G.C..GT.CC..T..AC..T..GAGC.A..AGTC.C..GG----..C mouse  
 178: ..G.C..GT.CC..T.....T..GA.C.AC..AGTC.CTGGT----..TT rat

628 638 648 658 668  
 619: GCTCTGAAAGTTGCAGTGCCTGTTTGTGAAATTCCTGCGAATCCTCCAAAA human  
 624: .....T.....C.....C.....T..T.....---- chimp  
 620: ..... baboon  
 621: .....T.....C.....T..T.....---- cow  
 472: .....C.G.CC..T...CA..A.....G..T.CT...C..A...--- cat  
 451: .T...C.C.C.CA...ACA-GGA.....T...C..CTA---- rabbit  
 367: A..T.CGG.T..A...G.TGA...C.....T...TCT.--.. mouse  
 224: ...T.C.G.CC...G.TGA.....G...T...TCT.--.. rat

678 688 698 708 718  
 669: AGAAGGCTAAATTGGTTTGGGTGTGCTCACGATGACTGGCAGTTAGGTTT human  
 671: .A...T...GG.....A.....T...CA... chimp  
 670: ..... baboon  
 668: .A...T...GG.....A.....T...CA... cow  
 520: .T.....G...C..CA..CA...G..A...A.....T... cat  
 496: -----A.C..GGCT...GCAT.....GA.G..TCCAG...CC... rabbit  
 415: .TG..ATC..C.....AA.C..A.TC...A.....CCATG.-C.T.C.. mouse  
 272: .TG..ATC.....C..AA.C..A.TC...A.....CATG.-C.CA... rat

727 737 746 765  
 719: TCAGCA-CTTAAAACCACTTTT-CCTTGTCGTTAAAAAC-CGATACACAT human  
 721: .T.....-.....A...C.-.....C.....-..... chimp  
 720: .....-..... baboon  
 718: .....-.....C...A...C.-.....C.A.....-..A..... cow  
 570: .TG...-T.....T..C...T.....AGTA.....A... cat  
 541: .....TT...C..AG.A...C..C...T..C..T...-TA.....C rabbit  
 464: ...AT.--.A..G..AG.A...-..C.---.C.....T.-. mouse  
 321: ...AT.--.A..G..A..A..C...C.---.G.....-TA----- rat

```

      775           790           800           809
      |           |           |           |
766: TCATTTTAGAAAATGTGTG-----AAGACACACACAAAGAAAAAAA-ATC
768: .....G.G.....-...
767: .....G.....-...
765: .....G.....-...
619: .....G...T.CT.A..ACATA.....T.....GG..G..T...
590: A.....T..CT....-----...T.T.--.G.GG.....-G.T
356: -----...CT....---G..GG.C..T-G..

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
rat

```

      828           838           848
      |           |           |
810: ATCAGTAAA-CTACCTTCCAAAGGTAGTAGCTGCTGGTTTTTCCCCCGT-
812: ...G.....-.....G..G.--T.A...A..C.....-
811: .....-.....-.....-
809: .....G.....--T.A...A..C.....-
669: ...T..TG-.C.....-G..C..CT.....CT...A-----
632: G.....A.....T.....T.TTT.TT.CT.....-----
378: ....C...G.C..A.....G..C..A.A.....T..C..GTG.TT.C

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
rat

```

      864           874           884
      |           |           |
858: -----ACATATAGAAATATTGTTTCTTTTCTCAGAAATTCT-
858: -----G.....A..-
859: -----
855: -----G..C.....A..-
709: -----A..C...C.C-----G..-
674: -----A.G.....-CC.G..C.CT.....-
428: TAGTTTTTAAAAG.A.....C.....G.C..TCT..G.A.TCA

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
rat

MIR

```

      902           912           922           932           942
      |           |           |           |           |
894: -CAACAAAAGCAATATGGAAATGTAGACAAGGGCACATGGGAGAACAGGA
894: -...G..G.....T.....G
895: -.....
891: -...G..G.....T.....G
740: -...G.GA..C...G..G..C.....A..T.A..T...CA.
706: -T...G.GA.....A-----T..TG..AACAC..CAT
478: GA..T.C.GA.....A.GC.C.G...-T..CT..A..TAG...CAG

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
rat

MIR

```

      952           962           972           982           992
      |           |           |           |           |
943: GCGGATGTGAACTCCCAGGATCTAGTACTTCATGATTCATGACCCTGCT
943: .....CTG.....G.
944: .....
940: .....CTG.....G.
789: CT..G.T..T..C..A.--C.CT..G..-T.....G.G...T..-A
746: CT..G-----
527: CT.-----

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
rat

MIR

	1002	1012	1022	1032	1042	
	↓	↓	↓	↓	↓	
993:	TTAGTCTCTCCATCCCTCTCAGGCCAGTTGCTCATCTGAAAAGTAGAAA					human
993:	.....T.....G.....T.....					chimp
994:	.....G.....					baboon
990:	.....TC.....G.....T.....					cow
835:	.....A..G...-AG.GA.....CC.TG..C.....G..					cat
751:	-----A.T...G					rabbit
530:	----..A.CT...T.CTCG...G.A.CAATT...C.....T.....					rat

MIR

	1052	1062	1072	1082	1092	
	↓	↓	↓	↓	↓	
1043:	TATGAATACTATTTTTTATTCCTACAGGGGTTTTGGAAATATCAAATTAT					human
1043:	.....G..C.....G.....					chimp
1044:	.....					baboon
1040:	.....G..C.....G.....					cow
884:	..---.G..TG..A.....C.T.....-..G..C...C					cat
763:	..GT.....C.....G.....T..A.....A.G..G.....G....					rabbit
576:	..CTCG.G...C.C....GT...TTAA.A-.....G.C.CC.....					rat

MIR

	1102	1112	1122	1132	1141	
	↓	↓	↓	↓	↓	
1093:	AAAACATTTGACAGTATTTTATCAATTAATAAATACTATATGCTTG-GTT					human
1093:	.....G.A...G.....TC..-...					chimp
1094:	.....A.....-...					baboon
1090:	.....C.....G.A...G.....TC..-...					cow
930:	.....G.....T.....G.A..C..G.....G..C...C...---					cat
813:	.....C.G.....A..G.A.G..G..GC...CG...C..TAA.					rabbit
625:	.....C..CA.A..-CC..T.A.....C...AGT.---CA.C...---					rat

	1151	1160	1170	1180	1190	
	↓	↓	↓	↓	↓	
1142:	TTATTAGTATGTTAA-CTGAATAGAAGATGACTCTATAGATAGATGGAGT					human
1142:	...A.....-.....					chimp
1143:	.....-.....					baboon
1139:	...A.....-.....					cow
977:	.....C.....-T..T.CCA.G..G..G.....G..CTC.....C					cat
863:	.....T..G.....AT..T.C..T..-----C..GC.CT.-.....C					rabbit
669:	.....GGCA...GAT..-----GCA....					rat

	1200	1210	1220	1230	1240	
	↓	↓	↓	↓	↓	
1191:	GATCAGATTGAATCCTAAATAATAATCCAGCTGGATGGACTTCTGCCTA					human
1191:	.....G.....					chimp
1192:	.....					baboon
1188:	.....G.....					cow
1023:	A...G..C.....GGC..ATA.....-T..G..T..G					cat
907:	A..G..C.....T.G.G..C-...A.AT...-----T.CA...A.					rabbit
698:	A.-.G....A.....G...CC...TG..T...G-----TGAG.AG					rat

MIR  
←

1250            1260            1270            1280            1290

1241: GCTCTGTTACCTGAGTTACAAATAATCTTAACTTCACAAAAGGGAAAGGA human  
 1241: .....C.....G..... chimp  
 1242: ..... baboon  
 1238: .....C.....G..... cow  
 1069: .....A...TAAT.....G..G.C...C.....T...AC..... cat  
 951: .T...A.....T...A.....C...C.....C.....AAG rabbit  
 743: CT...C.....G...T...C.GCT.....CT.. rat

MIR  
←

1299            1309            1319            1329            1339

1291: ACT-TTTATTAAGCATCTATTACATGCCAGGTTCTGTGCTATCTGCCTTA human  
 1291: ...-..... baboon  
 1292: ...-..... chimp  
 1288: ...-..... cow  
 1119: .TGAAC.TC.GC...C-.C.G...TA.....G.T..... cat  
 1001: ..G-A..T..G..TCC..GC....A..TA..G..A...C.T..... rabbit

MIR  
←

1348            1358            1368            1378            1388

1340: CACTTG-TCTTCCCGTAGCACCACAAAATGCCCTTCCATACATGAGAAAA human  
 1340: .....-.....T.....T..... chimp  
 1341: .....-.....T..... baboon  
 1337: .....-.....T..... cow  
 1168: TT..G.-.....-..G.....TGG...A.T...T-.C.T..... cat  
 1050: ....G.T.T....A...TG..-----C...G..A..C. rabbit

1398            1408            1418            1428            1438

1389: ACCGAGATTCAATGAGCAAAGCCACTGGTATTGTAAGATTAACAAAGG human  
 1389: ..--G.....A..... chimp  
 1390: ..... baboon  
 1386: ..---A.....G.....A.....G...C... cow  
 1215: .GT..AT...G.C.....G.....C.....G.T... cat  
 1085: .T-..A....G..A.....GGA...C.TC.C..G...T... rabbit  
 498: ..G....TG.....T..C..CGC..GG..TC.TC... mouse  
 798: ..G.....TA.C..C....G..TC.TC... rat

1448            1458            1468            1484

1439: TGCATCTGATTTGAAGTCCCATGTTCTTTTCTATTTTAA----AGTTAGA human  
 1437: .....C----- chimp  
 1440: ..... baboon  
 1433: .....C----- cow  
 1265: ..G.....C..A.....A.....-T.....CGCTGT..A... cat  
 1134: ..GC.....C..G.A.....-..G.CC...CTATG..C... rabbit  
 539: ..AG...A..A.T..T.T..C.....-.....C.CCAG.ACA... mouse  
 839: ..GG...C..A.T...TT.....C.C.-...C...C.CCAT.ACA... rat

	1494	1504	1514	1524	1534	
1485:	GGCACCTTTT	TAGGGAAAGT	ATTTTCATGGA	AATTCCTCTT	ATTCTTATGGA	human
1483:	.....	C.....	.....	G.....	.....	chimp
1486:	.....	.....	.....	.....	.....	baboon
1479:	.....	C.....	.....	G.....	.....	cow
1314:	A--A...	GG.....	T.....	-----	-----	cat
1183:	.A...A..G	.....	CT.....	A..G...C	.....	rabbit
588:	.A..TG...	---C.....	G..TAA..CA	-----	-----	mouse
888:	.A..TG...	---G.....	G..TAA..C	-----	GC...A..	rat

	1544	1554	1564	1574	1582	
1535:	AATTCCTACTCTT	TATAGAAACTTT	CAGAGTGATGGA	AGGGCAGTA--	AGA	human
1533:	.....	T.....	.....	---	---	chimp
1536:	.....	.....	.....	---	---	baboon
1529:	.....	T.....	.....	---	---	cow
1346:	-----	T.A.C..GC	..T..CT--	.....TA	.....G.TTT	cat
1233:	..CA.T.....	G.G...A..C	.....CT.....	T..TTT	..	rabbit
619:	-----	.....G...T	..CT.....	TG.T...A..T	..TTT	mouse
929:	..-----	..T.....G	..T..CT...	AA..T.....	TTT	rat

	1592	1602	1612	1622	1632	
1583:	CTGGAACATGAGTT	ATTTTCATACAGATT	CCCTTAGGAACATTT	AAAGA		human
1581:	T.....	.....G	.....	G.....	.....	chimp
1584:	.....	G.....	.....	.....	.....	baboon
1577:	T.....	.....G	.....	TG.....	.....	cow
1386:	T...T...TA	...C.G...G...T	...A..AG-	C.....	.....	cat
1283:	T...T...A	GA.....-G...T	G.A.T.C.T.A	...G.....	.....	rabbit
660:	T.A..TTG	-----G.C.A	CTT..G...A	.....G.AG	..G.T..	mouse
975:	T.A..T.G	-----C	-----GT	...G.AG	...T..	rat

	1642	1652	1662	1672	1682	
1633:	AGTTGTGATTATTT	CATTATTTTCATCTT	AGAAAGAGTGA	ACTAACTT		human
1631:	.....	.....	C.....	.....	.....	chimp
1634:	.....	.....	.....	.....	.....	baboon
1627:	.....	.....	G.....	C.....	.....	cow
1435:	G.C..CA	-----G	.....	.....	.....	cat
1332:	.....	-----G	.....CT.....	G.....A.....	T.....	rabbit
705:	.C.....	-----T	.....A.G.A	-.T.A..T	..	mouse
1014:	.C.....	-----T	.....A.G.A	.....	.....	rat

			← Alu →			
	1692	1702	1712	1722	1732	
1683:	TTTTGTTTGT	TTTGT	TTTTGTTTTT	TGAGACAGGGT	CTCGTG	human
1681:	.....	C.....	-----	-----	.....	chimp
1684:	.....	.....	.....	A..	.....	baboon
1677:	.....	C.....	-----G	-----	.....	cow

			← Alu →			
	1742	1759	1769	1779		
1733:	CTGTCACCCAGGCT	GGAA---TGCTGTGGT	GTGATCAAGACT	CACTGCAG		human
1722:	.....	TGC.....	C.....	.....	.....	chimp
1734:	.....	---	C.....	.....	.....	baboon
1718:	.....	---	C.....	.....	.....	cow



← Alu

	1789	1799	1809	1819	1829	
1780:	CCTCAGCCTCCCTGGCTCACATGATCCTCCCACCTCAGCCTCTTGAGTAT					human
1772:	.....A.....T.....G.....-					chimp
1781:	.....A.....-					baboon
1765:	.....A.....T.....-					cow

← Alu

	1839	1849	1859	1869	1879	
1830:	AGCTGGGAATAGTAGCTGAATAGCTGTGGTAGTAGAACTGCCACACCTGG					human
1821:	-.....C...A...T.....					chimp
1831:	.....C.....					baboon
1814:	-.....C...A.....					cow

← Alu

	1889	1899	1909	1919	1929	
1880:	CTAATTTTTTATATTTTTCTGTAGAGACAGGGTTTCATCATGTTGCCAG					human
1870:	.....G.....A.....C.....					chimp
1881:	.....C.....					baboon
1863:	.....G.....G.....A.....C.....					cow

← Alu

	1939	1949	1959	1969	1979	
1930:	GCTGGAAGAGTGGACAAATTTAAAAGGTGCTTGTGTTGCAAGCTCATCAAA					human
1920:	.....A.....A.....T...					chimp
1931:	.....					baboon
1913:	.....A.....A.....A.....T...					cow
1492:	.....A...T...G.....-C.C...T...CT.G...					cat
1356:	.A...A..A..T...CC...A---CCA...C..GAAT.G...					rabbit
746:	.GA.A..T.AT.....-CCC..C.....GGG..T					mouse
1050:	.....-GCC..C.A.....GGG..					rat

	1995	2003	2006	2016	
1980:	GGAAATAAA---TGGCAGATATTG--ACC-----TTTTGCATGTAAT				human
1970:	.....G.....				chimp
1981:	.....				baboon
1963:	.....G.....				cow
1533:	..G..C...----.ATG.....--..TAAGTAAC...T.T.....				cat
1400:	...C.G.ATAT..A..A.C.G..GT.T-----CC..TG...				rabbit
787:	.AGC.C.....C.C..T--..AGGTGGCG...TG.CC..				mouse
1080:	.A...C...----...CC.C..T--..AGGTGTCA...TG..C..				rat

	2026	2036	2046	2056	2066	
2017:	TTACCTAAAACATCTTAAAATGTAATTTGGAAGTTTTTATAGCATGGTT					human
2007:	.....A.....A.....C.					chimp
2018:	.....					baboon
2000:	.....A.....A.....G.....C.					cow
1577:	..G-----G.A.C...A.....A.....C..G.....CA					cat
1443:	...----.C.C...C..G.A.....CG.....					rabbit
831:	.C..TA...CT..G..CTG--.AG..C...C.GC.C..C.AC.TG..C.					mouse
1124:	.C..TA...CT.....G-----C.G.C.GC.C..CC...TG.ACC.					rat



	2254	2263	2271	2275	
2240:	----TCATT-ATGAATTCTGCT-	GAAACTAT--	GATTAAA-----	TGAT	human
2230:	-----A.....	G----	AT-AAA....		chimp
2241:	-----A.....				baboon
2223:	-----A.G.....	G----	AT-AAA....		cow
1779:	----C...C...T.....	T...G...G----	C...ATAAAA....		cat
1645:	----.TG...A...C.....	G----	AT-GCA....		rabbit
1104:	CAAAC.G.G-.A.A...CT.A...	GG.TA..A.G.-----			mouse
1312:	----.T...G..A..A...CT.A...	G.GG.TA.CA.G.-----			rat

	2282	2292	2302	2312	2322	
2276:	AT---AGCACAGAGGATCTAAAATGACATTACAGTACAGAGACACATGAG					human
2271:	.C---.....	T.....				chimp
2277:	..---.....					baboon
2264:	..---.....	T.....				cow
1813:	..CCC..A.....	G.....T.....				cat
1683:	..TAC...A..G..GA..G.....	T.....T.....				rabbit
1147:	.A---T...A.....	T.T.G...GT.....	AA.T..A.....			mouse
1352:	.A---T...A.....	T.T.G...GT...G..AA.T..A....	G....			rat

	2332	2342	2354	2359	
2323:	GGTGCTCTAACCAACTGCTATAATAAA-----	TAAATTG-----	TTC		human
2318:	.....				chimp
2324:	.....				baboon
2311:	.....				cow
1863:	.....G.....	C.....G...CAGCTG...			cat
1733:	.....G.....	T.A..AAATGAGT...C.-----			rabbit
1188:	.....GT...G...TC.....	-----T...AAGC--..T			mouse
1393:	.....GT...G...TC.....	-----T...AAGC--..T			rat

	2369	2379	2389	2399	
2360:	AAATATTGGGGAAAAATTAA-----	GGCCCGTTATGAATGGCAGT			human
2355:	.....	GG.....A....			chimp
2361:	.....				baboon
2348:	.....	GG.....			cow
1905:	....C.A...G...G.....	T...G...T.....A.			cat
1778:	.GG.....G...G.G-----	A.TAC.G.....			rabbit
1228:	.GT...A...G...T.G.GAAGGAAATTG..	GGAAA.G..G.C...G.C			mouse
1433:	.GT...AC..G...T.G.GACGGAAATTG..	GGAAA.G..G.C.....			rat

	2409	2418	2428	2438	2448	
2400:	GATGAATTCTGACTTTT-TAACATTAGCTAAACAGAGCAATCTTAGAATAG					human
2395:	.....	A.....C.....				chimp
2401:	.....					baboon
2388:	.....	A.....C.....				cow
1945:	.T.....--.....G..GTG..G.....	T---.C..G.....				cat
1817:	.T...CA.....-..G..C.G.....	A...C.....				rabbit
1278:	AC..GG..G.....-..G...GC.....	T.TATG.G..G.G.C.A				mouse
1483:	AC..GGA.G.....-..G...GC.....	TATG...G.G..GA				rat

	2458	2467	2477	2487	
2449:	ATGGTTTTTTAAAA	-AAATGAAATATAT	TGCTCTCCCCTACCC	-----	human
2444:	.....G...T..--	....A....T.....	.....T.....	-----	chimp
2450:	.....A.....	.....	.....	-----	baboon
2437:	.....G...T..--	....A....T.....	.....T.....	-----	cow
1990:	...T...C.CTTTT	...A...G...G...-	T.G...A-----		cat
1866:	...C...CTTTT	...C...G...C.G...T...	C...TCTACCAC		rabbit
1325:	..AC...CTTTC	.G.A...TCG..ATC.....	AC...--ACCAT		mouse
1530:	..AC...CTTTC	...A.G..TCGCATC.....	AC...----CAC		rat

	2494	2503	2510	2520	2530	
2491:	-----TCCCAG-	TTTAAAAAGTAGA---	TGTTTCATATTGGCCAATTTGG			human
2485:	-----	.....-	.....	.....	.....	chimp
2493:	-----	.....-	.....	.....	.....	baboon
2478:	-----	.....-	.....	.....	.....	cow
2032:	-----	..T-.....G...-	AGA.....A...C...			cat
1916:	CCTTCT.....-	.....C..G..AAGCA...	C.C...A...C...A			rabbit
1373:	TA--CTCT..GT-	...T..G...CTGG..C...	G..AC..AT.....			mouse
1576:	CATTATC.T...T..T..G...	CCGA..C...T.CA.A...C...				rat

	2539	2549	2559	2569	2579	
2531:	AAAATGC-TGAAAAGCACAAA	AGAAGAAGAAAAAAGTGGACTGATGTTAC				human
2525:	.....A.-.....	.....G.....C.....				chimp
2533:	.....-	.....				baboon
2518:	.....A.-.....	.....G.....C.....				cow
2072:	G...CA.-.....	T..C.A...-----	A..C.....G.			cat
1965:	G...CA.G.A..G..A.....	A...-----	-G.			rabbit
1420:	G...GAT-G.....	CTCA.C.....-	G...TG..AG..AC...G.			mouse
1626:	G...GA.-.A..G----	T.C.AC...G.G...G.CG..AG.....	G.			rat

	2589	2599	2609	2619	2629	
2580:	CGTCAGCCCTGGGAGGTGGGGGCTTTCTAGAGCCTTAGAGCCAAGCCAGT					human
2574:	.....G.....					chimp
2582:	.....					baboon
2567:	...C.....					cow
2109:	TA..T.GT...A...CT...AT.....	A.....G.....				cat
1998:	TC...-TA.....CT...-TG...CAT.T.....	G.....				rabbit
1467:	T.....C.....CT...CA.....	A-----GG.....				mouse
1671:	T.....AGT...A.....	T-----GG.....				rat

	2639	2649	2659	2667	2677	
2630:	TGGAGGCTTAGCTCAGGAGGCCTGCCTTCAAACA--	AGCCCAGGCTGTTC				human
2623:	.....CA.....C.....					chimp
2632:	.....					baboon
2616:	.....CA.....C.....					cow
2151:	.....A.....CA.....C.....					cat
2038:	.....GA.....GCC.A.....C.....					rabbit
1509:	A...A...T...A...A..A.....	C.....				mouse
1713:	...AA...T.....A...A.....	C.....				rat

	2687	2697	2707	2715	2725	
2678:	TCATTTT	GATTCCACAGACCTTCTGCTAGTA	--CAAAGGGGGAGTAGAGA			human
2673:	.....	.....	..G.	.....	.....	chimp
2680:	.....	.....	--	.....	.....	baboon
2666:	.....G.	.....	..G.	.....	.....	cow
2201:	.....	.....G.	--GG.	.....	.....	cat
2088:	A..C.	.....A..A.G.	GGTAGT.	.....G.	CA.	rabbit
1545:	.....	.....T.	.....G.	--AG.	.....T.	mouse
1749:	..G.	.....T.	.....G.	--AGG.	.....A.	rat

	2735	2745	2755	2765	2775	
2726:	CTGGGGGTCTAATGACCGCAAGAAGAGAATTAGAGACGCATGTTTATCTC					human
2721:	.....	.....	.....	.....	.....	chimp
2728:	.A.	.....	.....	.....	.....	baboon
2714:	.....	.....	.....	.....	.....	cow
2249:	.....	.....	.....	.....	.....	cat
2138:	TG.	.....G.	.....C.	.....	.....T.	rabbit
1593:	.....	.....A.	.....	.....	.....	mouse
1797:	.....	.....	.....	.....	.....G.	rat

	2785	2795	2805	2815	2825	
2776:	AATACATTTACTCTCATTAAGTTCATATTCACATCATGCATCTCC					human
2771:	.....	.....	.....	.....	.....	chimp
2778:	.....	.....	.....	.....	.....	baboon
2764:	.....	.....	.....	.....	.....	cow
2299:	.....	.....	.....	.....	.....	cat
2188:	.....	.....	.....	.....	.....	rabbit
1643:	.....G.	.....	.....G.	.....C.	.....C.	mouse
1847:	.G.G.	.....G.	.....T.	.....TG.	.....CA.C.	rat

	2835	2845	2855	2865	2875	
2826:	TTGAAAAAGTCTGCCACCCACCATTAATTAAAGCCACATTTTAAAAAGT					human
2821:	.....	.....	.....	.....	.....	chimp
2828:	.....	.....	.....	.....	.....	baboon
2814:	.....	.....	.....	.....	.....	cow
2349:	.....	.....	.....	.....	.....	cat
2238:	.....G.	.....C.	.....	.....	.....	rabbit
1693:	.....G.	.....	.....	.....	.....A.	mouse
1897:	.....G.	.....	.....	.....	.....T.	rat

	2885	2895	2905	2915	2925	
2876:	CAGTGTGTGCACTTTTATTCCAATCAAAAGTAGCCTCCTAAGTTTTGCAG					human
2871:	...C.	.....	.....	.....	.....	chimp
2878:	.....	.....	.....	.....	.....	baboon
2864:	...C.	.....	.....	.....	.....	cow
2399:	.....	.....	.....	.....	.....	cat
2288:	.....	.....	.....	.....	.....	rabbit
1743:	...A.	.....C.	.....	.....GG.	.....AG.	mouse
1947:	.....	.....C.T.	.....G.	.....G.	.....GG.	rat

	2935	2945	2955	2965	2975	
	·	·	·	·	·	
2926:	AGCAGGCAGGAGAATATCTGAGGCCTGACAGCTGTTACCTCTACACGGT					human
2921:	.....				T...	chimp
2928:	.....					baboon
2914:	.....				T...	cow
2449:	..T.....				A..	cat
2338:	..T.....G.....				A.G	rabbit
1793:	..T.....C.....				T..A..	mouse
1997:	..T.....				GGTA..	rat

	2985	2995	
	·	·	
2976:	GAAGAATCATGTGATTTACATT-----		human
2971:	.....		chimp
2978:	.....		baboon
2964:	.....		cow
2499:	.....T.....		cat
2388:	.....A..G...G.....		rabbit
1843:	...C...C.....		mouse
2047:	...CCC.....T...AAAACATTTTTTTTTCTTTTTTTTCAGAG		rat

2998:	-----	human
2993:	-----	chimp
3000:	-----	baboon
2986:	-----	cow
2521:	-----	cat
2410:	-----	rabbit
1865:	-----	mouse
2097:	CTGGGGACCGAACCCAGGGCCTTGCGCTTGCTAGGCAAGCGCTCTACCAC	rat

	3007	3017	3027	
	·	·	·	
2998:	-----AAAAGTTGTGTTTATTTCAGGGCCTAAAATA			human
2993:	.....			chimp
3000:	.....			baboon
2986:	.....			cow
2521:	.....CA...A.A.....T..C...T			cat
2410:	.....CCA.....			rabbit
1865:	.....GC.GT.....GT...A..C.GC...			mouse
2147:	TGAGCTAAATCCCCAACCCC...CA.T.....GT...A..G.G.G..			rat

	3037	3047	3057	3067	3077	
	·	·	·	·	·	
3028:	TAATAGCTATGATCTATTGTCTTGAAGAGTTGAAACATTCAATATCTAAT					human
3023:	.....G.....					chimp
3030:	.....					baboon
3016:	.....G.....A.....					cow
2551:	.....A.....G..G.....A.C.....					cat
2439:	...G...A...G.....G.....					rabbit
1895:	.....T..A..CT..C.ACT..T...T.A..GCT...T..G.....					mouse
2197:	.....A..C...ACT.....T.A..GCT.....G...G..					rat

	3087	3097	3107	3117	3127	
3078:	GACCTATTTAGT	GAAATTAACATTTATTTT	GATAAGTCAATGTTCTTTTG			human
3073:	.....	.....	.....	.....	.....	chimp
3080:	.....	.....	.....	.....	.....	baboon
3066:	.....	.....	.....	.....	.....	cow
2601:	.G.....A..CA.....	.....	.....	CA.....	.....	cat
2489:	A..T...A..CA....C.....	.....	G.....	CA...-....	.....	rabbit
1945:	..A....-.....	.....	.....	CA.....	.....	mouse
2247:	..A.C.-.....	.....	.....	CA.....	.....	rat

	3137	3146	3162	
3128:	GATACAATATCT-----	TTTATCTTTCCAAA----	TAGAGAAAT	human
3123:	.....GACCATATGCT.....	-----	.....	chimp
3130:	.....	-----	.....	baboon
3116:	.....GACCATATGCT.....	-----	.....	cow
2651:	.T...G.G.A.GACCATATGCC...	C...CG...CGGT.C...G..		cat
2538:	.....G.G.A.GACCACATGCC.....	C.C.....	TGATC.....	rabbit
1970:	..C....G.AGTGTTATATAG-CC.....	-----	GG..	mouse
2272:	..C..G..G.AGTGTCATATAG-.C.....	T.....	G...	rat

	3171	3181	3191	3201	3211	
3163:	CTAACT-ATATACCCTGTTTGAACAATTAAGCAGCACACTCCTATCAAAG					human
3169:	.....C-.....A.....TG.....					chimp
3165:	.....-.....					baboon
3162:	..C--.....TG.....					cow
2701:	.....G-...C.....C.....-.....G.....					cat
2588:	.....-G.G.T.....C.....T.....C.....TGT..					rabbit
2015:	.A.GT.A.A.....CA..CA..T.....T..AGGT...T...T...					mouse
2317:	.A.GT.A.A.....CA..CA..T.....GG..T..T.....					rat

	3221	3231	3241	3251	3261	
3212:	TCACCACACTTTATAACTTATACATGTACTATCAATGTTAGGACAAAGGT					human
3218:	A.....C.....					chimp
3214:	.....					baboon
3210:	A.....C.....					cow
2749:	A.....GG.....C.AA..G...					cat
2637:	A.....G..C.....T...C..G.....G...C.AA..G...					rabbit
2065:	A..G...AC.....-T...GT...TG...GC.AAT...AC					mouse
2367:	A..T...ACC.....C.TGCAC.....G...AC.AA..G...A.					rat

	3278	3288	3298	3308	
3262:	CAGTGTA--TT-TTTTTATCCAAATCATTGCACAAACAGTAATTACCA				human
3268:	.....--..-.....G.....				chimp
3264:	.....--..-.....				baboon
3260:	.....--..-.....G.....				cow
2799:	..A.....AT..-...A..T..C..C.....				cat
2687:	..A.....--..TC.....T..C				rabbit
2114:	T..A.GT.--..A.....T.....A.....AC.G.....				mouse
2417:	..A.A..G.--..AC.....T.....AC.G...T.				rat

	3318	3328	3338	3348	3358	
3309:	ATAGTTGTAGGATTGCACAACCATAGTCTATTTTCTTGGCAGTAGTGACT					human
3315:	.....A.....					chimp
3311:	G.....					baboon
3307:	.....A.....					cow
2848:	.....G.....A.....C.....					cat
2735:	....C.....C.....A.C.....C.AC					rabbit
2162:	.---.....C.....G..CT.....A.....G..CG.G					mouse
2465:	.---.....T.....CT.....A.....G..C..G					rat

	3368	3378	3388	3398	3408	
3359:	GTAAGTTCATAAAATTCATGAAAATTAGGAATGTTGATTTTAAAGTTCAA					human
3365:	.....					chimp
3361:	.....					baboon
3357:	.....					cow
2898:	A.....C.....A.....A.....					cat
2785:	C...C.....G.....A.....C...C.....					rabbit
2209:	A.....C..C.....C...A.A..T...AA..A...-...C.--					mouse
2512:	A.....CG.C.....C...A.A..T...GA..A..C-...--					rat

	3418	3428	3438	3448	3458	
3409:	GAAAGGTACTATTTGTAAACAGTTCAGGTCACACTCATGTTATACCATGT					human
3415:	.....					chimp
3411:	.....					baboon
3407:	.....					cow
2948:	.....C.....T.C..T.....					cat
2835:	.....C...GT.T.....					rabbit
2256:	-...A...TG...G.....AC-----T..TC...T.T....					mouse
2559:	-...A.....T.AC...A.....-TG.TC.C.TTT....					rat

	3468	3478	3488	3497	3507	
3459:	GCTAAGCAAGAGTTCTTTCCCTTCTAACTTCCTTT-AAATGAGATTTGTTC					human
3465:	.....C.....-G.....					chimp
3461:	.....C.....-.....					baboon
3457:	.....C.....-G.....					cow
2998:	.T.....---.....C.....-.....					cat
2885:	.....G.....-.....C..					rabbit
2300:	...GG.T.....C.C..T.CC.C.....T..A.....					mouse
2606:	A.....G..A...C.C..T.C..C..T...T...T..G.....C..					rat

	3517	3527	3537	3544	
3508:	TCTCCAGGAGCCTAGTAAAGGGTTTTTCATCCA-----TTCT				human
3514:	.....-----.....				chimp
3510:	.....-----.....				baboon
3506:	.....-----.....				cow
3044:	.T...T.....A...A.....AACAGATCTGCA-....				cat
2934:	.....AA.....AACAGATCTGCA-....				rabbit
2350:	.T.A.T...T.C.A.C..A..A.-.G..CA..AATTGATCTGTCT.CT.				mouse
2656:	.T.TTG.....C...C..A..A.-...C...AATTGATCTGTCT.CT.				rat



	3554	3564	3574	3583	3593	
3545:	TTTCTATTATTTTTCCTATTAAGCCCCCCC	-AGGGACCTTTCAATTTTA				human
3551:	.....					chimp
3547:	.....					baboon
3543:	.....					cow
3093:	...A...C...T.....					cat
2983:	.....C...C.....					rabbit
2399:	..C..G.CC.....					mouse
2705:	..C....CC.....					rat


	3603	3613	3623	3633	3643	
3594:	TGCTTATCTTTCTTTATATATTAATATCAAACACATTTTTATGTTGTGTT					human
3600:	....G..T.....					chimp
3596:	....G.....					baboon
3593:	....G..T.....					cow
3142:	....G.....					cat
3033:	.A..G.....C...C...---					rabbit
2447:	....G.....					mouse
2753:	....G.....					rat

	3653	3663	3673	3683	3693	
3644:	GATAAAAAGACAAATTATCGTTACCTCTTCCATTGGCAATTAGATTATTC					human
3650:	.....G...T.....					chimp
3646:	.....					baboon
3643:	.....G...T.....					cow
3192:	.....G...T.....					cat
3080:	.....G...T.....					rabbit
2496:	..C.....					mouse
2802:	..C.....					rat

	3703	3713	3723	3733	3743	
3694:	TAGAATAGTTCTGAACAAATATTTGATTCACCCAGCCAGTTAATGCTTTC					human
3700:	.....					chimp
3696:	.....					baboon
3693:	.....					cow
3242:	.....G.....					cat
3130:	C.....A...C.....					rabbit
2545:	..T.G.G.C.AA.G.....					mouse
2851:	..T.G.G....A..C.....					rat


	3749	3765	3774	3784	
3744:	CACAC----AAAAGCA----TCAAGTACAGCATT-AAATTCTCTAGTTAT				human
3750:	.....-----				chimp
3746:	.....-----				baboon
3743:	.....-----				cow
3292:	T...GAAG..GAG.-----				cat
3180:	T.T.T-----				rabbit
2595:	TGTC.-----				mouse
2901:	TG.C.-----				rat

	3794	3804	3814	3824	3834	
3785:	TCTGGTCATACCACCATACCAAAGACATGGGTCATCAGTGGGTCTGAAC					human
3791:	.....					chimp
3787:	.....					baboon
3784:	.....					cow
3338:	.....GT.....					cat
3210:	-.....T.G.T..T.AAG...GG..T.....					rabbit
2940:	..CTT...G..TG..C.CTA..C.AT.C.ACC...TCA..CA.....					rat

MIR  



3844            3854            3864            3874            3884

3835: ATTGGCATTGAAATGGTTTAAATCCTAGGGTAAAGCACCCCTGGACTACGT human  
3841: .....G.. chimp  
3837: ..... baboon  
3834: .....G.. cow  
3388: .C...TCC.....G..CC...T.....G...GAA cat  
3259: .C...T.....G.....GACTCCGCT.....AG..GG.A rabbit  
2990: C.A.A.....GCAA...G.....G...T.-T.....T..TG.A rat

MIR  


3894            3902            3918            3927

3885: GTTGAAACCTAACTT--TCTAGTCCTT----TCTACTAACT-TCCTTGTG human  
3891: .....TCG.....-.....-.....-.....-..... chimp  
3887: .....-.....-.....-.....-.....-..... baboon  
3884: .....G.....-.....-.....-.....C..... cow  
3438: .C.....G.G..CTAA..A.T..-----..AG...C...A.A.. cat  
3309: .C.....T.G.A..----..C...ACTC...TC...CA..AC... rabbit  
2584: .....-.....-.....-.....G..TC..G...AAA.- mouse  
3039: C..CG.T.TA.C.C..-----..AG..C-----..G...C.....-T.A..- rat

MIR  


3937            3956            3966            3976

3928: ACCTTGAGTACCTTGAGGG-CTTCAGTTTCCTCATTTAACAAATGATGGT human  
3934: .....C.....G..A.. chimp  
3930: .....-.....-.....-.....-..... baboon  
3923: .....C.....G..... cow  
3484: .....CG..-CA.....C..-..CAT...C.G.....GG... cat  
3356: .....-.....-.....-T..T.G..TTC...C.GG...CAG...G rabbit  
2604: ..ACA...G...CAG...A.....C.....CC.C.....GGTC.. mouse  
3076: -----..G...CAT..AA.....C.....C..C..C...GGT.. rat

3986            4004            4014

3977: TAAAGGGTGTACTG----ACTGGA-----GCCAGGAAGTTAGTC human  
3983: ..G...G.A.....-.....-.....-.....A.. chimp  
3979: ..G.....-.....-.....-.....-..... baboon  
3972: ..G...G.A.....-.....-.....-.....A.. cow  
3530: ..GGA...A.T.A..-----..TACCCATA.TA..... cat  
3396: ..G..A..AACT...TGTC..A..C---CCACA.....-..... rabbit  
2654: .TG.AA...ATTGAA..----..A..CTTCTGTA.A.T.T..G...CA.. mouse  
3121: .TG.A...ATG..A..----..A..TTCCTGTA.A...T..G...CAC.. rat

4024            4034            4044            4054            4064

4015: AGGTCTAGAGGAGAAGGGGCCAGAATACCCCTCTGAGGATCATGTCTTCTC human  
4021: .....-.....-.....-.....T..G.....C.. chimp  
4017: .....-.....-.....-.....G.....T.. baboon  
4010: .....A.....T..G.....C.. cow  
3576: ..AA.A...T...A.T...GC.T..CT.TGT.G.-...C...TC. cat  
3437: ---A...CA..T...CA...GC...CT..G..GG.CAAGTC.T.. rabbit  
2700: ..TATG.A...T.G..-----..GT.TCT..----- mouse  
3167: ...ATG.A...T.G..-----..G.TCT..----- rat

	4074	4084	4090	4100	4110	
4065:	CTGGTCCACTTACTTATCCAGCAC	----	CAGAAACAACAAGGTGGGGCTT			human
4061:	.....C.....	----	.....			chimp
4067:	.....	----	.....			baboon
4060:	.....C.....	----	.....C.....			cow
3625:	.....TG.....C.....GC.....	----	TG.....TG.....			cat
3484:	.....TG.....CT.....	AAAAA	.C..A.....A.A...			rabbit
2725:	..A..A.T.....C.G..AT..	-----	.A.....--.A.....			mouse
3192:	..A..T.T.....C.G.....T..	-----	A....C.A...AG.A.....			rat

	4120	4130	4140	4150	4160	
4111:	TTATGAGTGAGACTTGGGT	CAGGTTCCCAAAGAGGGC	CATCCCTAAATCTA			human
4107:	.....	A.....	.....			chimp
4113:	.....	.....	.....			baboon
4106:	.....	A.....	.....			cow
3671:	.....A.....G.....T.T..	TA..-	AA.....G.....			cat
3534:	.....T..GC.....T..C..	TA.....--..T..CG..	AC..			rabbit
2763:	.A.--.CT..TT..AAAATT..	C..A.....A.A.....G..T..				mouse
3235:	.AT--.CT.ATGC..A..T..	C..A.....A.T.C.....G..T..				rat

	4170	4180	4190	4200	4210	
4161:	GAAGAAGCCAACAACCATGCT	TGATGAGTTGTTTT	CATGATACATGTAA			human
4157:	.....G..T.....	G.....	.....			chimp
4163:	.....	.....	.....			baboon
4156:	.....G..T.....	G.....C.....	.....			cow
3720:	.....---T.....G.....C..G.....	C.....GAG.T.G.				cat
3582:	.....TG...G...C..G..A..	-----	ACAG.C.GG			rabbit
2811:	.G...TT..G.CC.T...TC..	G...A.....GAGT..C.GG				mouse
3283:	.G...-T....CC.T....CC.G..	A.....GAGTG.T.GG				rat

	4220	4230	4240	4250	4260	
4211:	GAAAAGATGCTCTGGGTCTAAT	CTTTATATCCCTTAGATATAAG	CATTCA			human
4207:	.....	-----	C.....			chimp
4213:	.....	-----	.....			baboon
4206:	.....	-----	C.....			cow
3767:	..G.....	-----	G...-...C..C.C.....			cat
3628:	..G.....G...A.A.-----	GC...T.....C.C..C.....				rabbit
2861:	..G.....AAGA.....A.-----	CA..GCT..-----	C...T.....			mouse
3332:	..G...C.AA.....G.-----	CA..GCT..-----	C...T.....T			rat

	4270	4280	4290	4300	4310	
4261:	GTGTAACATGCTATGTGGGAT	GGAAGCACTATCCTAACCCACAG	TTCATA			human
4252:	A...C.G.....	A.....	A..G..			chimp
4258:	.....C.....	.....	.....			baboon
4251:	A...C.G.....	A.....	A..G..			cow
3811:	...CCC.....G.....	C.....C.....T..A.T..				cat
3673:	A...C..C.....A.....G...T.AC.....	T--..AC.C..				rabbit
2902:	AGA.GCT.....TC.....	-----	A...TGG...G.G...			mouse
3373:	AGA.GCT.....AG.....T..A.-----	G...TGG.....A..T				rat

	4320		4337		4347		4357	
4311:	TCTTCTGCTTAAATG	--AC	AGTGTCCAGAGAGACCATAAAAAGACTTGAA					human
4302:	.....	--TT	.....G					chimp
4308:	.....	--	.....					baboon
4301:	.....	--TT	.....G					cow
3861:	.....TC	.G	AT.G	..A	.....G.G	.....G.C	..G..C	cat
3721:	..---	..CC.G	AT	..GA	.....G	.....C	.....C	rabbit
2944:	C..CT	..C.GG	CT	..C.A	.....AG	.....G.T	..A.C	mouse
3418:	C..GT	..C.GG	CT	..CC	..T	..AG	.....T..G	rat

	4366		4376		4386		4396		4405
4358:	TCAAC-ACAATGCCAAACACAATGGGTGGACTCCTTCAACT-AGCTATAG								human
4350:	.....-	.....G	.....C	.....-	.....G				chimp
4355:	.....-	.....G							baboon
4349:	.....-	.....G							cow
3910:	..T	..-	..G	..TG	.....-	..G	..C	..G	..G
3767:	.....-	.....AG	.....G	..C	..G	..G			rabbit
2993:	..GT	..C	..TC	..A	.....A	..T	..G	..G	..ATG
3467:	..CTA	..C	..TCT	..AG	..G	..-	..T	..C	..G

	4415		4425		4435		4445		4455
4406:	GAAGGAAGGTGGAGTGTGGGTGGGAATATTTCAACCTAGTTGTTGGTATT								human
4398:	.....	..A	.....						chimp
4403:	.....	..A	.....						baboon
4397:	.....	.....	.....						cow
3956:	.....	..C	.....AG	..C	.....C	..CC	.....		cat
3816:	.....A	.....G	..C	..T	..C	..C	..G		rabbit
3042:	..A	.....G	..CC	.....-C	..C	..G	..C	..A	..G
3516:	..A	.....G	..CA	.....-G	..C	.....C	..A	..A	..CA

	4465		4483		4492
4456:	CTTCCGAACAAACAGCTAA	-----	TGGCTGGGGG	-ACAGTAGG	
4448:	.....A	.....A	.....A	..C	..T
4453:	..T	.....	.....		
4447:	..A	.....A	.....A	..CA	..T
4006:	..TA	..T	..T	.....GGGTGGTGGGGCGTG	..G
3866:	..TA	.....C	.....GT	.....G	..A
3090:	..TAA	.....GTG	..TCCT	-----G	..TCA
3564:	..T	.....GTG	..CT	-----G	..C

	4501		4511		4521		4530		4540
4493:	A-AGTTGTGACTACACAGCATT	TTTTATCAATTCTAGG	-GAAGTTTAAGATA						human
4485:	..-	.....-A	.....						chimp
4490:	..-	.....	.....						baboon
4484:	..-	.....-A	.....A						cow
4055:	..-G	..G	..GT	..G	.....C	..C	.....-A	..C	
3903:	..-	.....CT	.....GCG	.....AA	.....T				rabbit
3128:	..-C	..C	..T	..G	.....A	.....A	.....-A	..TC	.....G
3602:	..CG	..C	..C	.....A	..A	.....-A	..TC	.....G	

	4550	4560	4570	4580	4590	
4541:	AGCTCTGCCTAAGTGGTTTATAAAAGCCATGCAGCCTACAAAATGAGCACC					human
4533:	.....A.....					chimp
4538:	.....					baboon
4532:	.....A.....					cow
4103:	.....A..T.....A.....G...C...T..T.....					cat
3952:	.....TC.....A..G...GGA.....T.TG.....					rabbit
3174:	.....T..C...AG.C.C..GAG..CAGG.T.CT..GC-.....GG					mouse
3639:	..TC.------C..G...CAGG.T.CT..GC-G.....GG					rat

gi|4507926|ref|NM\_003391.1| [complement]:3

	4600	4610	4620	4630	4640	
4591:	GTTGCATTTCCATACCTTCCTGCCAGCTCTGTTGTTGTGAAGATTCATCA					human
4583:	.....G.....A.....					chimp
4588:	.....					baboon
4582:	.....G.....A.....					cow
4153:	A...TG.-.....G.....G.....					cat
4002:	A.....C.....					rabbit
3223:	..A...GG-.....T.....G.....					mouse
3673:	..A...GG-.....T.....					rat
6:	.....C..G...G.....C..G.....					fugu

gi|4507926|ref|NM\_003391.1| [complement]:3

	4650	4660	4670	4680	4690	
4641:	GGGCTCTGGCATCCTTTCCCTTTCCCTTTCCCTTTGCATCCACAAATGCGCGG					human
4633:	.....G.....G.....					chimp
4638:	.....					baboon
4632:	.....G.....G.....					cow
4202:	.....G.....T.....					cat
4052:	.C.....G.....G..T..					rabbit
3272:	.....G.....C...G...T...G..A..					mouse
3722:	.....G.....T.....A.....					rat
43:	.C..C...G..C.CT.C...C..T..G..G...G..G..CT..					fugu

gi|4507926|ref|NM\_003391.1| [complement]:3

	4700	4710	4720	4730	4740	
4691:	GCAAATTTGATCCCATAGTCAATGTTATCACTGCAGCCACCCCAATCAAA					human
4683:	.....					chimp
4688:	.....					baboon
4682:	.....					cow
4252:	.....G..G..					cat
4102:	.....C.....G..G..					rabbit
3322:	.....C.....G.....A..G.....G..G..					mouse
3772:	..G.....G.....G...A...G...G..G..					rat
93:	CTG..GCGC..GG.G.G...C.C..GG..G.....G.....GCTG..					fugu

gi|4507926|ref|NM\_003391.1| [complement]:3

4750 4760 4770 4780 4790

4741: AATGCCTTTGCTGTCCTTGGCGCTTCCCATCTTCTTTGGATCACAGGAAC human  
 4733: .....C..... chimp  
 4738: .....C..... baboon  
 4732: .....C..... cow  
 4302: .T.T.C.....CG...T..... cat  
 4152: GG...C.....AG...TT..... rabbit  
 3372: GG.....A.....TT.....G..... mouse  
 3822: GG.A.....C.A..C..TT.....G..... rat  
 143: GGA...C...GC...CG..ACGAG...T...GGCG..G..G...G..... fugu

gi|4507926|ref|NM\_003391.1| [complement]:3

4800 4810 4820 4830 4840

4791: AGGATTTTACTTCTCCTTGGCTACAGGCCCTGGTGATGGCAAATACAAC human  
 4783: .....C..... chimp  
 4788: .....C..... baboon  
 4782: .....C..... cow  
 4352: .....A.....C..... cat  
 4202: .....A.....C..... rabbit  
 3422: ...C...A.....G..... mouse  
 3872: ...C...A.....G..... rat  
 193: ...G.CC.GG..G.....G.....T.GC.CC.GA..GT.A..C..C..... fugu

gi|4507926|ref|NM\_003391.1| [complement]:3

4850 4860 4870 4880 4890

4841: CCAGCTGAGGAGATGGCATAAAACAAAGGCAGATTCCCGACTACTGAAAC human  
 4833: .....C..... chimp  
 4838: .....C..... baboon  
 4832: .....C..... cow  
 4402: ..C.....C...G..... cat  
 4252: .....G..T..... rabbit  
 3472: .....A.....G.....C..... mouse  
 3922: .....G.....C.....G..... rat  
 243: ..G..G.....G...G..T.TG...CACC..G..G..G..... fugu

4900 4910 4920 4932

4891: AAAAATGCTTTTCTTAAAAGTGGTCCGGTAGCACTAT-----TTCTG human  
 4883: .....C..... chimp  
 4888: .....C..... baboon  
 4882: .....C..... cow  
 4452: .G.....CA...T..A.TTG...G----- rat  
 4302: .....T..C.....G-----C..... mouse  
 3522: .....C.....C...A.AG...TCTCTCCAAGTG..... rat  
 3972: .....C.....A.AG...GTCTCTGCAAGTG.....

4942 4951 4961 4971 4981

4933: AATAACTTTCATATGAC-AATTGTTTAATATTTGCTCTGTTTCAGACAAC human  
 4925: .....T-.....C...G..... chimp  
 4930: .....T-.....C..... baboon  
 4924: .....T-.....C..... cow  
 4494: .....C.CT.T-GGC.....CC.C.CA...ACC..T.G..TA cat  
 4344: ..G.....C.C.GT-G.C...A.G.....A...C.AGG.G..T. rabbit  
 3572: C...G...C...GTG...C..GG...CAC..CC.----- mouse  
 4022: CG.GG.....C...GTG...C..GG.G..CCG...CC.----- rat

```

          4991          5001          5011          5027
          |           |           |           |
4982: CTTTGGCCACTAGACAACAAGGTACTGATATTCTTGAAG-----GGTTCTTT
4974: .....
4979: .....T.....C.....
4973: .....
4543: G.CCA..C.CG.G..G.....G.G.....----.A...C.
4393: .A.....A.G.C.GA..GG..A.GG...ATTTAT...A..
3613: -----A-----
4063: -----C----C.....

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5037          5047          5057          5067          5077
          |           |           |           |           |
5028: TCTAGAGCCCAGGCTCTTTCTTTAATATGAACCATCTCCATCTAATATAG
5020: ..C.....G.....T.G...T.....G.A
5025: .....
5019: ..C.....TG.....T.....T.....G.A
4589: .....AG.....AC.T.G.....TTGCT..G.A...A.A
4443: .....TA.....AC.....TG..TG..CG.....
3623: G....TT.T...AA.....T.CCT.A.T.T..G.GG..
4073: .....T.....TGA...C.....T.CCT.A...T..G.GG..

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5087          5097          5107          5122
          |           |           |           |
5078: GTTTTTGTCAATTTAGGTATCTGTGTGGCAGCTCTTCT-----TAAATAA
5070: .....A.....A.A.....
5075: .....
5069: .....A.....A.A.....
4639: .C.....G.G.....GG.....A..AACACCT.-AGAG....T.
4488: -----A.....AGAA..AG...C..CAAAGC...G.
3673: .A..A..C.....AA.G...A.TG.T..A.....C-----T...C
4123: .A..G..C..G..AA.....A.TG.C..A.C...C-----T...C

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5132          5143          5153          5163
          |           |           |           |
5123: GCAGTATCAAAGA-----AAAAGATGGCCTTGCCCAGCTCCTGGCT
5115: .G.....
5120: .....
5114: .G.....
4688: AGC...G...GAAATGCAGC...CCT...C.....C.....
4525: CA...A...AC-----CC..A.....T..
3718: AG...GA.....AA.G...A.TG.T..A.....C-----T...A.T.
4168: AG...GA.....T.....A..T.....A...

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5173          5183          5193          5203          5213
          |           |           |           |           |
5164: TCACATTAGTCTCAAACACAGGCTTGCCCTGTTTCAACAGAGAGCTCTAG
5156: .....C.....C..
5161: .....
5155: .....C..
4737: .T..C...CT.....
4557: ...A.CC..C...TG...T.GCAT.G.....
3755: ...-----G.....CAT..A...C-----CA.A.....
4205: ...-----G.....TAT..A...C-----CA.A..AC..

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5223           5237           5246           5256
          |             |             |             |
5214: ATGTCCTAGAAGAGAGGA-----GCATAG-CATCTCTAGGCCTTTTTTCT
5206: .....-.....-.....
5211: .....-.....-.....
5205: .....-.....-.....
4750: C...G.....-.....-TC.....T..CA.T.
4586: .....-.....TA..-...TAGTTTT..CA...
3786: .....AC.....CA..TCGGGT..CAGT-..C..TAGTTT..CCA...
4236: .....C.....GA..-.....TG..T..C..TAGTAT..C.A.G.

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5263           5273           5288
          |             |             |
5257: TT-----AC-----AGTCTGAATGCTACAA-TTCTA-----TCATTCC
5249: ..-----..TTTAC.....-.....
5254: ..-----..TTTAC.....-.....
5248: ..-----..TTTAC.....-.....
4789: AACTTGTAAT.G-----..C...G.T..C.G.T...G-----
4610: .A-----AAAT.....T.....A-----
3835: G-----AAA.....T.....T.....G.....TCAT.....
4280: G-----AAA.....TAC.....T.....G-AG...GCAT..G...T

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5298           5308           5318
          |             |             |
5289: ACAATATAGTTGGGTACTCATGACACCACAGCTT-----
5286: .....A.....G.....-.....
5286: .....-.....-.....
5285: G.....A.....G.....-.....
4830: ...A.C...T...T...C.CT.TGT...C-----
4646: .TG...TT...A...T.....-.....
3874: .TTG..AC...TA.A.G.....T.G.....
4319: .TTG..AG...T..A.G.....T.T.....GGAAAAAGCCTGCCAA

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

5323: -----
5320: -----
5320: -----
5319: -----
4864: -----
4672: -----
4369: CATAGACACTAGTGGGTGTGATTGTAGTCTTGGCTACTCCAAAGGATGGG

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
rat

```

          5335
          |
5323: -----TCCTC-----AAAATATC
5320: .....A...
5320: .....-.....
5319: .....A...
4864: .....T-----G...A.C.
4672: -----CTG.T-----GGAAAAAAAAA...A.C.
4018: .....GCA
4419: GTGAAAGACT...AAACCAAGAGTTTAAGGCCAGAACAAAC...GA

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          5342           5352           5362           5372           5382
          |             |             |             |             |
5336: ---CTTCCAAACCTCCAGGACTTACTGAAGATACTCATATGCACTTAAAT
5333: ---.....C.....TT.....
5333: ---.....-.....
5332: ---.....C.....T.....
4878: ---.....TT.G...C...G...G...C...C.G...GA.G..G
4696: AAA...TG..TA...CA.....C.T...G...T.....
4025: ---.C.....TG..CA..T..TG..CT.AA.GGCAAGT...C.
4469: ---.C...G...T...CA.....G..C...AGGGCAA.T...C.

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat



	5392	5402	5412	5422	5432	
	:	:	:	:	:	
5383:	TATTGAGAATGAAATACTGAATTCAAAGAAATCTAGGGACTAAGGTGGGA					human
5380:	.....					chimp
5380:	.....					baboon
5379:	.....C					cow
4924:	GG.CC...C.....C.....G..G.....					cat
4746:	.....C.T....G.....G.....C.....G..G...A...					rabbit
4072:	..CA.GC.....C.....A.T.G....A.T..G..G.....					mouse
4516:	..CG.GC.GAA..G.....G.....A.T..G..G.A...G					rat

	5442	5452	5462	5472	5482	
	:	:	:	:	:	
5433:	AGAGAATTCTGGCAGTAACCAGCCCCCTGCATTAACACTGGAGAGCTTGG					human
5430:	.....G.....T.					chimp
5430:	.....					baboon
5429:	.....G.....T.					cow
4974:	.....A.....T.TG..TG.....GA.....T.					cat
4796:	C.....C.....T..G..G.....-.....T.					rabbit
4122:	.....G..A.T..CC.T.....G..GG.....C...--					mouse
4566:	.....A.T..CTG.....G..C..C..TG...C.A...--					rat

	5492	5502	5512	5522	5532	
	:	:	:	:	:	
5483:	GCTTGGCATTGACTTTTCATAAGTAATTGAGAGATTGCTGAAGGCAGTATG					human
5480:	.....A....					chimp
5480:	.....					baboon
5479:	.....A....					cow
5024:	..C.....CA.....CG.....T.....A....					cat
4845:	.....CA.....C.....A.....T.....A....					rabbit
4170:	.....C..CAG.....GG.....A.....T.....TGA..C.					mouse
4614:	.....C..CAG.....GGG.....A.....TGA....					rat

	5542	5552	5562	5572	5582	
	:	:	:	:	:	
5533:	CAATATCCTTGAGTTACATACTATATGTCTAACTATTAAGGTGAATTTAC					human
5530:	.....					chimp
5530:	.....					baboon
5529:	.....					cow
5074:	.....--					cat
4895:	.....--.....G.C.....G....					rabbit
4220:	.....G.CC..G.--.....C.GG.....T..C.					mouse
4664:	.....C.G.....G.--.AG.....C.C.G.....T..C.					rat

	5592	5602	5612	5622	5632	
	:	:	:	:	:	
5583:	TTTCTTCTGGAACACCTGCACTAATCACTGGTATTGGGTAAAAGACAGTG					human
5580:	.....					chimp
5580:	.....					baboon
5579:	.....					cow
5122:	.....C					cat
4943:	.....A.....C					rabbit
4268:	.....C.....T.....C..C.G.....					mouse
4712:	.....AG-.....G..GT.....C..C.G.....					rat

	5642	5651	5661	5671	5681	
	↓	↓	↓	↓	↓	
5633:	AAAAGTTTTT	-CTTTGGTTTT	CTGGGAAGGAAACAAATTT	ACCGCCTATA		human
5630:	.....	-	.....	.....	.....	chimp
5630:	.....	-	.....	.....	.....	baboon
5629:	.....	-	.....	.....	.....	cow
5172:	.....	C	.....	-	.....	cat
4993:	.....	C	.....	-	.....	rabbit
4318:	.....	G	.....	G	.....	mouse
4761:	.....	C	.....	G	.....	rat

	5691	5701	5711	5721	5731	
	↓	↓	↓	↓	↓	
5682:	ATTAGACTTGGGCAAGAACCCTTTGGGGTGCTTTCTTAGAATTGTTCTTT					human
5679:	.....	.....	.....	.....	.....	chimp
5679:	.....	.....	.....	.....	.....	baboon
5678:	.....	.....	.....	.....	.....	cow
5221:	.....	.....	.....	.....	.....	cat
5042:	.....	.....	.....	.....	.....	rabbit
4368:	.....	.....	.....	-	.....	mouse
4811:	.....	.....	.....	-	.....	rat

	5741	5751	5761	5771	5781	
	↓	↓	↓	↓	↓	
5732:	ATTAGAGCACAGGCTACTTTTCACTTACAGGCTGAAAGGTACATATTTTCAG					human
5729:	.....	.....	.....	.....	.....	chimp
5729:	.....	.....	.....	.....	.....	baboon
5728:	.....	.....	.....	.....	.....	cow
5271:	.....	.....	.....	C	.....	cat
5092:	.....	.....	.....	C	.....	rabbit
4417:	.....	AG	.....	CG	.....	mouse
4860:	.....	AG	.....	C	.....	rat

	5791	5801	5811	5821	5831	
	↓	↓	↓	↓	↓	
5782:	TGCAATAACTACATTAATAATTATTTTAATAATCTGTAGTAACTCATAACAC					human
5779:	.....	.....	.....	.....	.....	chimp
5779:	.....	.....	.....	.....	.....	baboon
5778:	.....	.....	.....	.....	.....	cow
5321:	.....	G	.....	.....	.....	cat
5142:	.....	.....	.....	.....	.....	rabbit
4467:	.....	.....	.....	.....	.....	mouse
4910:	.....	.....	.....	.....	.....	rat

	5841	5851	5861	5871	5881	
	↓	↓	↓	↓	↓	
5832:	GGTGTGTGGTATAGTGACAGATATAAGGCTCTTTAGGGTCCGTGTGCAC					human
5829:	.....	.....	.....	.....	.....	chimp
5829:	.....	.....	.....	.....	.....	baboon
5828:	.....	.....	.....	.....	.....	cow
5371:	.....	.....	.....	.....	.....	cat
5192:	.....	.....	.....	.....	.....	rabbit
4517:	.....	.....	.....	.....	.....	mouse
4960:	.....	.....	.....	.....	.....	rat

	5891	5901	5911	5921	5931		
5882:	CTCATT	TTTTCA	AGTGG	AGCTGT	ATTTT	CATTGTTATTAGCATGCCCTTTTA	human
5879:	.....	.....	.....	.....	.....	.....	chimp
5879:	.....	.....	.....	.....	.....	.....	baboon
5878:	.....	.....	.....	.....	.....	.....	cow
5421:	.....	.C..	.G..	.....	.....	TC..	cat
5242:	..TG..	.C..	.....	.....	.....	GT.G..	rabbit
4567:	.....	.....	A..	.....	C..	G..	mouse
5010:	.....	.....	A..	.....	CC..	G..	rat

	5941	5951	5961	5971	5981		
5932:	TTAATGGTTGCTGCGGCAAATATATTAACAATCCAAATAGAAGCTGGATA					human	
5929:	.....	A..	.....	A..	.....	C..	chimp
5929:	.....	T..	.....	.....	.....	.....	baboon
5928:	.....	A..	.....	A..	.....	C..	cow
5471:	.....	G..	A..	.....	G.A..	C..CA.C..	cat
5292:	..C..	A..	.....	C..	A..	A..C..	rabbit
4617:	.....	A..	.....	A..	.....	C..GCG	mouse
5060:	.....	A..G..	.....	A..	.....	C..CT	rat

	5991	6001	6011	6021	6031		
5982:	ACCTAATGCCAATGCAAGGCAGAAAACAGAGAACCATTGGTGATTCAAT					human	
5979:	.....	.....	.....	C..	.....	.....	chimp
5979:	.....	.....	.....	C..	.....	.....	baboon
5978:	.....	.....	.....	C..	.....	.....	cow
5521:	.....	CA..	.....	G..G..G..CA..	C..C..	.....	cat
5342:	.....	G..	.....	--C..G..G..G..G..G..G..T..GG	.....	.....	rabbit
4667:	.G.G..	G..	.....	G..G..G..CA..	.....	.....	mouse
5110:	.G..G..G..	.....	G..	G..G..	C..	.....	rat

	6041	6051	6061	6071	6081		
6032:	ATGTCAAGAGGAGTGTGACTTTTTGAACCACACAGCTGGGAGAGCAAACC					human	
6029:	.....	.....	.....	.....	.....	.....	chimp
6029:	.....	.....	.....	.....	.....	.....	baboon
6028:	.....	.....	.....	.....	.....	.....	cow
5571:	G..G..	C..	.....	.....	A..	.....	cat
5390:	.....	C.C..	.....	C..G..	A..CA..	.....	rabbit
4717:	C..	CC..	.....	.....	A..GC.T	.....	mouse
5160:	C..	G..CC..	.....	G..	A..GC.T	.....	rat

	6089	6099	6109	6119	6129		
6082:	ACCTTTT--CACATTGAAGCCCTGCTTGTTTCCGTTTGTTCATTTCAGTGCT					human	
6079:	.....	--G..	.....	.....	T..	.....	chimp
6079:	.....	--	.....	.....	T..	.....	baboon
6078:	.....	--G..	.....	.....	T..	.....	cow
5621:	.....	--G..	T..	.....	GT..	.....	cat
5440:	.....	C--TGA..	G..	.....	TG..	.....	rabbit
4767:	..T..	C--G..G..	T..CA..	A.G..C..C..	TG..	.....	mouse
5210:	..T..	TC.GA..	C..T..C..	A.G..C..	TG..	.....	rat

	6139	6149	6159	6169	6179	
6130:	AAAATTTATTATACATCCCTT	GCAATATTTGCTCTGCTAGTCTCATTATT				human
6127:	.....G.....					chimp
6127:	.....G.....					baboon
6126:	.....G.....					cow
5669:	.....TG.....T.....					cat
5488:	.....G.....G.....A.....					rabbit
4815:	.T.GC...C.G.G.....	-----				mouse
5260:	.G.GC...C.G.G.....	AG.C...CT.....C.....				rat

	6189	6199	6209	6219	6229	
6180:	AAAAATCAGGAAAACATATCTACACC	TATAATGACACTTACCTCAGC				human
6177:	.....					chimp
6177:	.....					baboon
6176:	.....					cow
5719:	.....G.....					cat
5538:	.....G.C.....					rabbit
4851:	-----	A.G.....TG..				mouse
5310:	.....C..TT.TTG..AG.....	A.....G.....				rat

	6239	6249	6259	6268	6278	
6230:	TTTCAGAAAAATTTACCCCCCAAACCTCTAA	-CCATCAAAAAAGGAATC				human
6227:	C.....					chimp
6227:	C.....					baboon
6226:	C.....					cow
5769:	C...A.....C.-...TG.....					cat
5588:	C.....C.C.-.T.T.G.....	G...AA.G.T				rabbit
4888:	.A..CAGG.G.C.C.-.T.T.....	A...GC.....G.TGTA..				mouse
5360:	CA.TCAGG....C.-.AT....	A...G-TT.....G...A..				rat

	6288	6298	6308	6318	6328	
6279:	AATCATGCCCTGTAGTTAGGTAAAATCAATTATATGACTATT	CGCCATAG				human
6276:	.....C.....					chimp
6276:	.....C.....					baboon
6275:	.....C.....					cow
5817:	.....CA..TA.....	A...T.....				cat
5636:	.....C...C.AA.....	A..G...A...T.T.....				rabbit
4937:	T..T..TT.-----	G.T...C..G..GAG..T..TC..				mouse
5408:	T..T..TT.-----	G.T...C..G..GAC..T..TC..				rat

	6338	6348	6360	6368	
6329:	GTAGCAGGTAGTGCTCTCCAGAGG	-----GAAATATGATGG-T-TAC			human
6326:	.....C..C.....	-----			chimp
6326:	.....C..C.....	-----			baboon
6325:	.....C..C.....	-----			cow
5867:	-----	A-----G.G.....-CG.			cat
5686:	.G.A.....G...T..TA-----	CC.G..G...GC.T			rabbit
4980:	.....A..CA...CG.TG...CT-----	C...-CT.			mouse
5451:	.....A.CCAA...GGTG...TTCTGTTCTTA	GG.C..TG..C.-C.T			rat

	6385	6395	6405	6415	
6369:	GAGAGCTGT	---TTTAAAGAGTCCCAGCTTATACTATATAGACCACAGAT			human
6365:	.....A	----	.....TT	G.....	chimp
6366:	A.....	----G.....			baboon
6364:	.....A	----	.....T		cow
5900:	-.....C	----	G..C..T...AG..T.....		cat
5727:	.G..A....	---C.C.G..G....C...G.GT...CA..GA....G-			rabbit
5012:	A..GT...GGGC.CGT.-	.....A..G.GG..AGACT..A.C..			mouse
5500:	.G..A....	----C.....A.C..GG..AG..CT....C..			rat

	6425	6433	6443	6453	6463	
6416:	ATTCTAAGTGGA	--ATTGAGATGTTTTGTAAAAGAAGGCGACTAATACAT				human
6412:	.....	--.....	.....T.....	.....C		chimp
6413:	.....	--.....				baboon
6411:	.....	--.....	.....T.....			cow
5946:	T.....	A---C.....C...C.C.....	T.....	G.....		cat
5773:	.C...G...A--	C...C...GC.....G...T..GAG..G-G.				rabbit
5061:	GGGTG..AAA..AC.C...	G..-----T.....C---				mouse
5546:	TGGTA..AA...AT.C...A.G..	-----A.T...C...C---				rat

	6473	6483	6493	6503	6513	
6464:	GCTAATGTGACTTAATCTCAGATAGTGGCTTTCAGATAAAATTAACCTTTT					human
6460:	.....	G.....	.....A.....			chimp
6461:	.....		.....A.....			baboon
6459:	.....	G.....	.....A.....			cow
5993:	A.....	G.....GC.....G...A..CAC...				cat
5820:	.A-----G.....	--...G.CA.A...C...C...A.C.T...				rabbit
5096:	-----G.....	T.T.CC..C.....T..G...A.C..C..C				mouse
5581:	-----G.....	T.T.CC.GC...T..T...T..CA.C..C.CC				rat

	6521	6527	6537	6547	6557	
6514:	ATTATA--TCCA---	TT-TTACAGTTTAGGAAAATACCTTTTCCATAGTT				human
6510:	.....	.....C.....	.....C...			chimp
6511:	.....	-----				baboon
6509:	.....	-----				cow
6043:	...C--CT.G---	...T.....G...G.TG.GG...				cat
5864:	.C..C--CG.---	...C.T...C...C.T..GC.....				rabbit
5139:	.C...TT.T.---	C...C...T.A..C.GT.A..GCTG.G...				mouse
5624:	T.....TA.T..ATT..	...T..C..T.A..T..T..GCTA.G...				rat

	6567	6577	6587	6597	6607	
6558:	ACCCCATTTATCTTCTAAAGCTTGGTTTGGGATTTAGAAGCCGCGCCCA					human
6554:	.....	CA.....	.....A.T.....			chimp
6555:	.....					baboon
6553:	.....	CA.....	.....A.T.....			cow
6087:	...C..GG..G.....	C.....TAT...G..GT..A.A..T.				cat
5908:	.T.....T...C...TC...C.T.....	G..GT..A.T.....				rabbit
5186:	GT.TGT.....A.TG...TCAA.C.C.....	GT..T..AATAT...				mouse
5673:	GT.TGTA...C.A.TG...TCAA.C.CT.....	G...T...TAT...				rat

	6617	6627	6646	6655		
6608:	TGTTT	TAGAGAT	CACATAGAGGAGGAAA	-TTCCCAAAGCTTAA	-GTAT	human
6604:	.....	.....	.....	.....	.....	chimp
6605:	.....	C.....	.....	.....	.....	baboon
6603:	.....	.....	.....	.....	G.....	cow
6137:	CA..C.....	A.....GG.....	--.....-A.T.....	T.....T.....	T.....	cat
5958:	..A.C.....	TGC.....C.G..	AA..AC..T..GT..C..	TAA..		rabbit
5236:	.A....C...	T.G.GT.C.TGA..	AAT...--..AT.C.CA....	T....		mouse
5723:	.....C...C.C..	T.G.TGA..A.T..	--..GGTGTGTA.....	T....		rat

	6665	6675	6685	6695	6705	
6656:	GTAGCACTAGTCTTATTTTTTTAAGGAGAAAAGAAGAGACATTTTTATGAAGT					human
6652:	.....	.....	.....	.....	G..	chimp
6653:	.....	.....	.....	.....	.....	baboon
6651:	.....	.....	.....	.....	G..	cow
6184:	T.....	.....	.....	A..CA.....	G..TG..	cat
6008:	T.....AC...G..	-CA.....	-----C.CCA.....	G..G..		rabbit
5284:	T..C.....	GAG..CG..T-	-----A.....	G.T....		mouse
5771:	T.....A.....	AG..GG..T-	-----C..G.-	.....		rat

	6715	6725	6735	6745	6755	
6706:	GGTCTATTACGGGAAAGACATGGAAGACGGGGATGATACTATATCAGGTA					human
6702:	.....G.....	G.....	T.....	G.....	.....	chimp
6703:	.....	G.....	.....	.....	.....	baboon
6701:	.....G.....	G.....	T.....	G.....	.....	cow
6234:	.....T...G.....	GT.....TAT.....	-..GAG.G.T.-..G			cat
6052:	.....T.C.G...G..	GG...G...T.T.....	CGG.G.G...---			rabbit
5326:	-----A.....	AG..C.....T.T....	C...G.G.G.T...G.			mouse
5812:	-----A.....	TG...G...AT...C.A.GC..	G.T...G.			rat

	6765	6775	6785	6795	6805	
6756:	ACCAGACAGTATTTTCGAAAAGCAACAAGAGAAAATAAATTGTCTAGGTGCAG					human
6752:	.....C..T.....	.....	.....	.....	.....	chimp
6753:	.....T.....	.....	.....	.....	.....	baboon
6751:	.....C..T.....	.....	.....	.....	.....	cow
6282:	.T...G.....	T.....G...-..G.....	C...C.....			cat
6098:	-----CT..GG-	-----C.G.CC.....	TG..			rabbit
5367:	--..CG.G.-...	T.....CT.G-----	G.GG..T.TG..A...A			mouse
5853:	--..C.....G...T.....	CT...-----G.GG..	TGTG...A..A			rat

	6815	6825	6835	6845	6855	
6806:	AATTCATCCTGGTATAACTTGAAACAATTACATTAACCTGTTGACTGAA					human
6802:	.G.....G.....	-----	.....	.....	.....	chimp
6803:	.....	.....	.....	.....	.....	baboon
6801:	.....A.....	-----	.....	.....	.....	cow
6331:	.....C.....C.....	G.....-CA..				cat
6123:	.....C.G.G.GG..C.....	C.G...G...A..G.C...				rabbit
5409:	..A.....CCT.G...G.T.....	C...G.G.....C.T				mouse
5896:	..CCTG.----A.GC.G..G.T.....	C.....GT.....C..				rat

	6864	6870	6880	
6856:	AGAAAAC-AAATCAC	----AATCTGCTTC	-----A	human
6846:	.....	-----	-----	chimp
6853:	.....	-----	-----	baboon
6845:	..C.....	-----	-----	cow
6380:	...TG.A-	.....TTAA.....	GT-----G	cat
6173:	.....AG.....	-----	C-----	rabbit
5459:	CC...TA-	..CCAGT-----	G.T.T.AT-----	mouse
5942:	CC...A-.G.A.A-	----C.A.AA.AA.AACAACAACAAAAACAAAA.		rat

	6887	6897	6907	6917	6927	
6881:	TTTC	---AGAAATAATTTCCAAAGCAAAAATATGACTTTTCTAAATATTT				human
6871:	....	---	T	.....		chimp
6878:	....	---		.....		baboon
6870:	....	---	T	.....		cow
6409:	....	---	G	.....T	.....C.C	cat
6199:	....	---	T	.....C.C.C	.....G	rabbit
5484:	A...TAA.A...	A.G.....	G	-----T.T.T...C		mouse
5987:	A...---	TA.GA.....	G	-----G.T.T.....		rat

	6937	6947	6957	6967	6973	
6928:	GTCATGTATTATTCAAACACATTACTAAATAGCTAGATGTT	----	CCTTT			human
6918:	....T.....	-----	-----	-----		chimp
6925:	....T.....	-----	-----	-----		baboon
6917:	....T.....	-----	A	-----		cow
6456:	....T...C.....	.....C...A.....	ACTCTG.A.			cat
6246:	-----C.....	GG.....T.A.....	-----TA...			rabbit
5523:	..T-----	G.....CA.T...A-----	-----TA...			mouse
6023:	..-----	C.G.....G.....CA.T...C-----	-----A...			rat

	6983	6993	7012	7022		
6974:	ATTTAAATTAAAAATTTAGCACATTGACT-GGTTTTTCATTTTACCTCCA				human	
6964:	.....	-----	C	.....		chimp
6971:	.....	G	.....			baboon
6963:	.....	G	.....			cow
6506:	....C.CAC.....	-----AC	.....			cat
6285:	....G...G.....	C--G.....C.A.....				rabbit
5556:	.C.....	G.T.....TG...G				mouse
6056:	.C.....	CG.T.....C.TG...G				rat

	7032	7042	7050	7060	7070	
7023:	GATGGTTTGGTACCATGTAGATAATA--GCCCTAAAATGTTTTTCAGTTAC					human
7013:	.....	---	G	.....A		chimp
7020:	.....	G	---	.....A		baboon
7013:	.....	---	G	.....A		cow
6555:	....T.....T.....T.....	CG.T.G	.....A			cat
6332:	....T...A...T...C.A.....	G--T.G	.....A			rabbit
5600:	....T.GC...A...C.....	G--ATT.G.G	.....A...A			mouse
6101:	....T...C...GA...C.....	G--A.T.G.G	.....A...A			rat

	7078	7088	7098	7108	7118	
	⋮	⋮	⋮	⋮	⋮	
7071:	GTGT--TTAGATGAATCACTAAAAATGTTATGTGTGAAGTAGTAGCACATT					human
7060:	.....--.....					chimp
7067:	.....--.....					baboon
7060:	.....--.....					cow
6604:	A...-C.....C.....G.....C.....A.....					cat
6379:	.....-T.G.....C.....A.....					rabbit
5647:	.....TT.....C.....G.....A.....					mouse
6148:	C..C-T.....G.....G.....A.....					rat

	7128	7138	7148	7158	7168	
	⋮	⋮	⋮	⋮	⋮	
7119:	TCAAGAGCTGGCTTTTGTAAACAAAACAAATTTTGATCTTGGGCCTTTTCTT					human
7108:	.....C.....					chimp
7115:	.....C.....					baboon
7108:	.....GC.....					cow
6653:	.....T.....C.....C.....					cat
6428:	.....AT.....T.....G.....A.....TG.					rabbit
5697:	G.....CA.....A.....A.....---					mouse
6197:	G.....T.....CA.....A.....A.....---					rat

	7174	7184	7194	7204	7214	
	⋮	⋮	⋮	⋮	⋮	
7169:	AGAAA----GATCCTTTTTACAGCTATCACAAAATGAAACAAAATCCAAA					human
7158:	.....----T.....A.....					chimp
7165:	.....----.....A..G.....					baboon
7158:	.....----T.....A.....					cow
6703:	.....AACG...T.....A...C.....T.....T.....					cat
6478:	.....AACT...T.....A...C.....-----C..T..G.					rabbit
5744:	.....AACC...T.G...CAG.TC.....-..C.....TT.....T..					mouse
6244:	.....AGCT...T.....CAG.TC.....-..C.....TT.T...T..					rat

	7224	7234	7244	7254	7264	
	⋮	⋮	⋮	⋮	⋮	
7215:	TCTAAGTGGTGACATCTGTATTTCTAATGTGTTGCTATTGAAGTTTCTC					human
7204:	.....AC.....C.....					chimp
7211:	.....AC.....C.....					baboon
7204:	.....AC.....C.....					cow
6753:	.....A.....GT.CT.A-.....GG.....-----G.....					cat
6518:	.....A.....TG.T.T..C.....G.....G.....G.....					rabbit
5793:	.....A..C...TGGGAA.GC...GG...C.A..G...AC...G					mouse
6293:	...C.A..C...T-----GC...TGGG...C.A.C.A...C...G					rat

	7273	7283	7295	7304	
	⋮	⋮	⋮	⋮	
7265:	TAATTTTTT-GTATGGAGATAAATCAAGCA-----A-TGC-CTATTAAG				human
7254:	.....-.....-----..T..G.....				chimp
7261:	.....-.....-----..T.....				baboon
7254:	.....-.....-----..T..G.....				cow
6797:	.....G-AGGGT.....G.....A-----..G-...C...				cat
6568:	.C.....-..ATCTT...A...A.....-----G..TA...G...				rabbit
5843:	.CC...CA.G..T.T..G.....-.....T-.A.C.GG.				mouse
6337:	.CC...A-.G.....G...T.CA.TGTCAAG.-..T-.A.C.GGA				rat



	7314 ↓	7321 ↓	7331 ↓	7341 ↓	7351 ↓	
7305:	TACATAGGCACAGT---TTTTATTTGGGGTAGAGAGATTGTTACCTAGGA					human
7294:	.....G.....					chimp
7301:	.....					baboon
7294:	.....G.....					cow
6837:	.G.....TCA.---...G.....C---.AT...-----G...					cat
6610:	...C.AT.T.T...-----...G...					rabbit
5883:	.GGGC....GG..TTGC..CG.....-----..GA.T.....G...					mouse
6384:	.GGGC....GG..GTG...C.....-----..GA.T.....G...					rat

	7361 ↓	7371 ↓	7381 ↓	7391 ↓	7401 ↓	
7352:	AGGCAAAACCTCTAGAAGCTAGGGTTTCTTGAAGGTTATGGATTGTTCAAT					human
7341:	.....A.....G.....TG.C					chimp
7348:	.....G.....T...					baboon
7341:	.....G.....TG.C					cow
6876:	G.....TG.....A..CACC...G.....A..G.C...T.GC					cat
6639:	...C...A...A...A...A...A.A.G...T..AC.G...					rabbit
5927:	.AT...C..-G.A...A.....G...C...C..GCT..C					mouse
6428:	...T...C..-G...CAA.....G...C...A...CC...C					rat

	7409 ↓		
7402:	TC--TCTTTAAA-----		human
7391:	..-----		chimp
7398:	..-----		baboon
7391:	..-----		cow
6926:	..GT..G.C...		cat
6689:	..-----		rabbit
5975:	C.--TACA...CAAACAAACAACAAAAACAAAACCACTTTTTTTTTTTAA		mouse
6476:	..--TAGG...-----CAAACAAACAACAAACAACACTTA		rat

	7412 ↓	7422 ↓	7431 ↓	
7412:	-----GTATTTGCTTTATAAGA-AAA			human
7401:	-----A.-...			chimp
7408:	-----A.-...			baboon
7401:	-----A.-...			cow
6938:	-----CGCTTGCC.G...TT...T.GGA.----			cat
6699:	-----ACGA..TGA..T...C.T.TG			rabbit
6023:	TCTTCTATCTACTGTCTTGTTCCTTTT..C...T.C.CT.G.A.----			mouse
6511:	TCTTCTATCCACTGTCTTGTCTTCCTTT-.C...T.C.CT.G.AC----			rat

	7441 ↓	7451 ↓	7461 ↓	7477 ↓	
7432:	TATTTATAAGGATGAGAACTAATTACCTTTGTGTTTTCT----AAGGCTA				human
7421:	.....A..C.....				chimp
7428:	.....				baboon
7421:	.....C.....				cow
6962:	-.....C.....C..C.C.....T.T...T.-TTA.....T				cat
6720:	...C..C..A.G.A.AGC.....A.T...TGAC.C.G.CATA.....T				rabbit
6069:	--C..GC.....ACT.-----...T.----T.AA.CT				mouse
6556:	--C..C.....ACC.....CT.....-.....T.----TTAA.CC				rat

```

          7487       7497       7510       7520
          |         |         |         |
7478: AATCTAGAAATTTTGGAGGTGTATTCTT-----GCAGGAATATTTTATAG
7467: .....C.....C.....
7474: .....C.....
7467: .....C.....
7010: .....C.A...C.....A.....
6770: .....C.A..CA.....A...G...G.
6103: .....G..CA..-..A.C.C...-AA.A..C.G...GGGT
6599: ...T.....G.CA.....A.C.A...AAGACCCAA.A..C.G...GCGT

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          7530       7548       7558       7568
          |         |         |         |
7521: TTTTGCTAGTTCTGTCCTT--GTTTCTCTGCCTGTGACTGGTAACTATCT
7510: A.....G...
7517: A.....
7510: A.C.....G...
7053: G..A.....TG..T.AA.....A.G...G.AG...
6813: ..-----..C.....T.....A.C...G...
6145: ..-----..CC...A...
6649: ..-----..C...A...

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          7578       7588       7598       7608       7618
          |         |         |         |         |
7569: GTTGAATGAGTAAATTACAAATGTTTCTAAAAAATTGTACTGTCTTATTCT
7558: .....T.....C...
7565: .....
7558: .....T.....C...
7103: ..G.....G.....G...C.....C.T...A.C...
6843: ..C.A.....G.....CC...G.C.A.T.T...
6159: --..A..A.....CC.....AA...G.A.T...T..C...
6663: --..A.....C..C.....TA...GGCA.T...T..C...

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          7628       7638       7644       7654       7664
          |         |         |         |         |
7619: GACTCTCTAAAGTCAAACAGGCAA----ATGTTCTCCATTCTCTATGAC
7608: .....C..G.....T.....
7615: .....
7608: .....C.....T.....
7153: AG.....G..CA..G.....ACAC..A..T..T..T..C...
6893: .G.....G.CA.C.....G...C...
6207: .GAA...GGG.CAC.TGT..C.----GCA.C..T.C...C.C..A.T
6711: .GGA..G..G..CAC.CAT..C.----G.....C...C..G.A.T

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

          7674       7690       7700       7710
          |         |         |         |
7665: CACGGGACATTTTGGTAAT----TTTATGTTCTTCTTATAAATGGTCTTG
7654: ..T.....
7661: .....
7654: ..T.....
7203: ..T.T.T.G..A..G.C---T.....C..C.C...G...
6931: ..TCCAGTC...A...C-----GGA.GT..TC.C.....G..A
6253: ..T...GGG...A...GCAATGA..CA.CGCC.GGTC..TCTAC...T
6757: .....G.-...CA...GCAATAA.G.CC.C.C..CAGC..TCTAC...T

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	7720	7730	7740	7750	
7711:	CCCTTTGCCTTTTCCTATTTCATCTATGAGCATATTTAGGTGTCC	-----			human
7700:	..TG...T.....	-----			chimp
7707:	.....	-----			baboon
7700:	..TG.....	-----			cow
7250:	G.....C.....A.G.A.....T...AAAAGAG				cat
6976:	.T.....T.....AG.....A...C.....T...TAAGGAG				rabbit
6303:	.ATC..AT...C...GA.....A.ACG.T.C..C...C.T.GGAACAGAG				mouse
6806:	.GTC..AT...C..C.-.....A.AAG.T.CG.C.....T...TAACAGTG				rat

	7763	7773	7783	7793	
7754:	-----ACA	ACTCTAAGACGTA	ACTTTTCTCCAAGCA	ACTAATTG	human
7743:	-----	T.....	C...T.....		chimp
7750:	-----				baboon
7743:	-----	T.....	C...T.....		cow
7300:	AG--TTCTTC.....-	T.G.A...CC	.....T.....		cat
7026:	AG--TTCTTT.....	TA.T.A...CCAC	.....T.....		rabbit
6353:	AGAATTCTTC.....C.-...	TTG.AG.GC...T...T...C..			mouse
6855:	AA--TTCTTC.....C.-...	TTGT.G...CC...TG.T...C..			rat

	7802	7811	7821	7831	7841	
7794:	TAG-AAATCTTT-GGATAGCTTCATTGGAATTTCTTGATTATTTCCAGGA					human
7783:	...-.....-.....				A..	chimp
7790:	...-.....-.....					baboon
7783:	...-.....-.....				A..	cow
7347:	..A-.....-.....					cat
7074:	.GA-...A...AAA.CT..C.....C.....					rabbit
6402:	..AC..G.....-.....CA.....A.....C.....					mouse
6902:	..AG..G.....-.....CA.....A.....C.....					rat

	7851	7861	7871	7880	7890	
7842:	TAAGCTGCTTTAGGCCAAATTCAGCCCTCCCAT-AACCAACACAAAATCA					human
7831:	.G.....-.....					chimp
7838:	.G.....-.....					baboon
7831:	.G.....-.....					cow
7395:	...A..A.....-.....					cat
7123:	A.....G...A.....CTG...T.....T.....					rabbit
6451:	.GG-----C.....CT.TGCA...T...G.....					mouse
6951:	.GG-----C.....CT.TGCA...T.G.G.....					rat

	7900	7910	7920	7930	7940	
7891:	TCACTGACAGTCACAAGAGTTTGCATAAATGTCTGAGAGGGAACCTGGCC					human
7880:	.....T.T.T.....T.....					chimp
7887:	.....					baboon
7880:	.....T.T.....T.....					cow
7444:	.....T.G.....AT.....CAG..A.A..T.....					cat
7172:	.....TG.....G.G.....T.....AA...TTG.....					rabbit
6494:	.....T.TG.GA.C...G.G.....-..AA...GT...T.....					mouse
6994:	.....T.TG.GA.C...G.G.....-..GAA...GT...T.....					rat

	7950	7960	7970	7980	7990	
7941:	TTCTGTGAAGAATG	GAAAGAAATTGTGTAGCATGAGTGGTTTAAAGTTCTG				human
7930:	.....	.....	.....	.....	.....	chimp
7937:	.....	.....	.....	.....	.....	baboon
7930:	.....	.....	.....	.....	.....	cow
7494:	.....	.....	.....	.....T.....	.....T..	cat
7222:	.....C.C.....	----C.....	.....	.....T.G.G.....	.....A	rabbit
6543:	.....GG.....	G.....	C.....	GCTG.....	GCT.....C.T..	mouse
7043:	G.....GG.....	G.CACA.G..	-C..	C.T.....	TC.	rat

	8000	8010	8020	8029	8039	
7991:	AGTACTGTGGCAAAGTATTCTGCTTCATCTGAAAAAAA-	TCTGAAGGAAG				human
7980:	.....T.....	.....C.....	.....	.....A.....	.....T.....	chimp
7987:	.....T.....	.....	.....	.....-	.....	baboon
7980:	.....T.A.....	.....C.....	.....T.....	.....A.....	.....C.....	cow
7544:	.....T.....	.....AC.C.A.....	.....	.....G.C-C.....	.....	cat
7268:	..C..AT.....	..CG..C.....	.....A.....	..GG..-	.....	rabbit
6593:	..C.TCCCA.....	..GC.....	.....	.....-G.....	.....T.....	mouse
7092:	..CGTCTC.....	.....	.....	.....-G.....	.....T.....	rat

	8049	8059	8069	8078	8088	
8040:	TACAAGTTAGAAATCTCTTATTTACCTGAGGTC-	TAGACTAATTTAAACTA				human
8030:	..TG.....	.....	.....C.-.....	.....G.....	.....	chimp
8036:	.....	.....	.....-	.....	.....	baboon
8030:	..TG.....	.....	.....G.C.-.....	.....G.....	.....	cow
7593:	..GC.....T.....	.....	.....C.T..G.....	.....G.G.....	.....	cat
7317:	..TTC.....G.....	..TA.....	.....	..C.T.G.G.....	..G.C.....	rabbit
6624:	..C.C..C.G.....	..C..C.....	.....	..C.TC.....	..G.C.GT-.T	mouse
7118:	..C..C.....C.....	.....C.....	.....	..C.TC.....	..G.CGG.-.G	rat

← Alu

	8098	8108	8118	8128	8138	
8089:	GTTCTGTTTCTCCAGTCCCTGTCACCCAGGCTGGAGTGCAGTGGCAATAT					human
8079:	.....	.....	.....	.....A.....	.....CA.....G..	chimp
8085:	.....	.....	.....	.....	.....	baboon
8079:	.....	.....	.....	.....A.....	.....CA.....G..	cow
7643:	..CC.C-C.....	.....T..AA.CT.....	.....	.....	.....	cat
7367:	..C.CA.....	..A.....T..AA.CT..	.....	.....	.....	rabbit
6673:	..C..A.....T..T.T..	.....	.....	.....	.....	mouse
7167:	..A.....T..T.T..	.....	.....	.....	.....	rat

← Alu

	8148	8158	8168	8178		
8139:	GTTGGCTCACTGCAACCTCCTCCTCCAGGTTCAAGTGATTTTC-----					human
8129:	A...T.....	.....	.....	.....-	.....	chimp
8135:	.....	.....	.....	.....	.....	baboon
8129:	A...T.....	.....	.....	.....-	.....	cow
7668:	..CC...T.A.....	..A.AG.....	A.T..AG.....	.....	ACAAATG	cat

← Alu

	8192	8202	8212	8222	8232	
	⋮	⋮	⋮	⋮	⋮	
8183:	ATTCCTCAGCCTCCCAAGTAGCTGGGATTAAGGGCATGTACCACCACACC					human
8172:	..G.....					chimp
8179:	..G.....					baboon
8172:	..G.....					cow
7715:	.A.T.C...T.T..T..					cat

← Alu

	8242	8252	8262	8272	8282	
	⋮	⋮	⋮	⋮	⋮	
8233:	CATGGGGTTTCGCCATGTTGGCCAGGCTGATCTCGAACTCCTGGCCTCAA					human
8222:	.....A.....T.....A.....					chimp
8229:	.....					baboon
8222:	.....TA.....T.....					cow

← Alu

	8292	8302	8312	8322	8332	
	⋮	⋮	⋮	⋮	⋮	
8283:	GTGATCTGCCACCTCAGTCTCCCAAAGTGCTGGGATTATAGGAGTGAGC					human
8272:	.....T...TG.....T.....C.....					chimp
8279:	.....					baboon
8272:	.....T...G.....T.....C.....					cow
7636:	.....A.					cat

Alu  
←

	8342	8352	8362	8372	8382	
	⋮	⋮	⋮	⋮	⋮	
8333:	CTGGCTGTTACCTCTAGTTCGAACCTCCTTCATCTCAGCAATTCTACAGC					human
8322:	.....G.....T.....C.....T.....					chimp
8329:	.....C.....					baboon
8322:	.....G.....T.....C.....T..T..					cow
7641:	TA.C.CCC.T...C...T...T.C.C.....CC.....					cat
7370:	.CA..T..A.C...T.....C.T..CG...GC.....					rabbit

	8392	8402	8412	8422	8432	
	⋮	⋮	⋮	⋮	⋮	
8383:	TCTGAAGAAAATAATAGTGTCAAGATTAAGTTACAGTATTTTATAAATGA					human
8372:	.....C.....G.....					chimp
8379:	.....					baboon
8372:	.....C.....G.....					cow
7691:	-----G.....G.....C.....					cat
7416:	.....GCA..C.C..C.....C.G.A.C.....C..G..G..					rabbit
6911:	.....G..C.C.G.....					mouse
7455:	.....C..G.....					rat

	8442	8452	8456	8466	8476	
	⋮	⋮	⋮	⋮	⋮	
8433:	ATCCCCAGCTTTGATGGATA-----TATTTTCTTTAGGATCACTGGTCA					human
8422:	.....					chimp
8429:	.....					baboon
8422:	.....G.....					cow
7716:	..T.....CC.A..C-----GC.A.....G.A.G..					cat
7466:	...---GCAC...TATGAG..C.A..G...G.....					rabbit
6926:	...T.....GA..G-----GCCA...T.....T.TA.TG					mouse
7471:	.C..T.....AA..G-----GCCG...T.....T.TA.TG					rat

```

      8486      8496      8506      8512
      |      |      |      |
8477: ATATTGCTTCCTTTGATATGTGATCTAAAGG----TTTTATTCAA-----
8466: .....
8473: .....
8466: .....
7760: .A.C.....T.....T.....-----..TA.TC.-----
7513: .A.C.....A.....T.....AT---...T..TT.-----
6970: .AGC..G.A..C.C..C.....C...CTGG...T..GT.-----
7515: .AGC..T.....CC.C..G...T.C.....-----..T..TTTTTTCA

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      8520      8530      8544
      |      |      |
8518: -----ATATGTAGATATCTTAATAGA-----TCCAGA
8507: -----..C.C.....C.-----
8514: -----
8507: -----G.....C.C.....C.-----
7801: -----G...G...C...G...G.TTTTTCGCAGACAGAT.TTG..
7555: -----G.G.....G.....T...
7015: CCCGTCC..A.C.A.GGA..C.CG..-----C.T.C.
7561: ACCCTCC..A.C.A.GGA..C..G..-----C.T.C.

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      8554      8564      8574      8584      8594
      |      |      |      |      |
8545: GATGATCATTTCATAAAATGAGATGTACATCTAATTTGAAAATCATTGCAAAA
8534: .....A.T.....C.T.....C.....
8541: .....C.....
8534: .....CA.T.....C.T.....
7844: .GC..A....TG.C.....A.....T.....C.G.G...A...
7582: .G..G....TGC.....AA.G....CAC.....C..G...
7049: .G.T.A.C..GT.....A.CCTCA.A..G..A..T.-----
7595: .G.T.A...GTC.....A.CT.T..A....A...A.C.-----

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      8604      8614      8621      8631      8641
      |      |      |      |      |
8595: ATGGTTGTAAGCACTTTGA AAAA---AAAATCCTGATATGTTTTAAACACT
8584: G.....T.....
8591: .....C.....
8584: G.....C.....
7894: ...A...G.....G...-GG...G.....AGCG.....C
7632: .....GG..T.....AGA..G..T.....
7090: -----G---...G.AT...C.A.....TG.G.
7640: -----TG---...G..T...C.A.....TG.GA

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      8650      8660      8670      8680      8690
      |      |      |      |      |
8642: GAGAGCC-ATGCATAATATATCCAAAGATTACTCGTGCTAGATATTTGCA
8631: .....C.....T.....
8638: .....
8630: .....C.....T..T.....
7943: .....TG.A..C..CG.GC..G....C..AT.....G..C..T.
7675: .....TGCA.....G.....G.....T.....
7117: A.A.A..T.CAACC..G.G.GT.T.T.G.G.A.T.CCA.G.GC.....
7667: A.ACA..T.CAA.C...C.GT.T.T.G.G.A.T.CCGCG..C.....

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	8700	8710	8720	8730	8740	
8691:	AACTCTCTTTAACAAGGTCAGTTTCTTTAATTGATTCACTGGCAAGATA					human
8680:	.....G.....-TG.....					chimp
8687:	.....G.....-TG.....					baboon
8679:	.....G.....-TG.....					cow
7993:	.....G.....CA-.....TG.C..					cat
7725:	.G.....G.....CA-.....TG.C..					rabbit
7167:	.T.T.A.G.....-A.....T.....TG.AC..					mouse
7717:	.T.TA.A.G.....-AC.....T.....TG.AC..					rat

	8750	8760	8770	8780	8790	
8741:	ATCTAGGTGAAGTCTTAAAAATTCATGAAGCTGAAATTTATTATTAACCT					human
8729:	.....C.....					chimp
8737:	.....C.....					baboon
8728:	.....G.....					cow
8042:	.....C.....G.C.....					cat
7774:	.....-.....C.....					rabbit
7214:	CC.....A.....C.G.....C.....GC.....C.....					mouse
7764:	CC.C.A.....C.G.G.....C.....GC.G.....C.....					rat

	8800	8810	8820	8830	8840	
8791:	TTCAAAAATTTGCGATGTCATATTGAAACTCCAAAAGGAATGCAGAAGAA					human
8779:	.....C.....A.....					chimp
8787:	.....C.....					baboon
8778:	.....C.....					cow
8092:	.....A.C.....G.....					cat
7823:	.....C.....A.....G.....					rabbit
7264:	.....C.....C.....T.....T.....G.....					mouse
7814:	.....C.....T.....T.....G.....					rat

	8850	8860	8870	8880	8890	
8841:	TATAGTTCTTAAACTAGAGAATAAAAATTGCAGAATATCGCAGTAAATTAA					human
8829:	.....T.....					chimp
8837:	.....T.....					baboon
8828:	.....T.....					cow
8142:	.....T.....G.....					cat
7873:	.....T.....G.....AT.....A.-C.....					rabbit
7314:	.....T.....G.....AT.....G.....A.-C.....					mouse
7864:	.....TG.G.....AT.....G.....A.-C.....					rat

	8900	8909	8919	8929	8939	
8891:	CTTTAGGGATACTCT-AAGAATGAGAGTACTACGCCCTTGGGGGATTTTA					human
8879:	.....-.....					chimp
8887:	.....-.....					baboon
8878:	.....-.....					cow
8192:	.....A.-.-.G.....					cat
7923:	.....A.....C-.....G.....					rabbit
7363:	.....G.....T.....G.....G.....					mouse
7913:	.....G.....-G.G.....GG.....					rat

	8949	8959	8969	8979	8989	
	⋮	⋮	⋮	⋮	⋮	
8940:	GAGACATTCAGTTATGCATTTGGCCTCATAAAAACCCTAGGGCTGTGATGA					human
8928:	.....					chimp
8936:	.....					baboon
8927:	.....					cow
8239:	.....					cat
7972:	.....					rabbit
7413:	. . . G . . . . . T . . . . .			. . . . . G . . . . .	. . . . . AC . TGA .	mouse
7962:	. . . G . . . . . T . . . . .				. . . . . CC . CG . .	rat

	8999	9009	9019	9028	9038	
	⋮	⋮	⋮	⋮	⋮	
8990:	TTACATGATAGAAACACCCTCTGTTAAGCATTACCAAG-TGCACAGTCTG					human
8978:	.....			-	.....	chimp
8986:	.....			-	..... T . . C .	baboon
8977:	.....			-	..... T . . C .	cow
8289:	.....			-	..... T . . C .	cat
8022:	.....			-	..... T . . C .	rabbit
7463:	. G . . . . . C . . . . .	. . . . . C . . . . .	. . . . . T . . . . .	-	. . . . . C . . . . .	mouse
8012:	. G . . . . . GC . . . . .			-	. . . . . C . . . . .	rat

	9048	9058				
	⋮	⋮				
9039:	GATGATTTTCTTAGGAATTGGGGGGG----GGGTAGG-----CAAAAA-					human
9027:	.....		-----	-----	..... A	chimp
9035:	.....		GGGG	-----	..... -	baboon
9026:	.....		-----	-----	..... A	cow
8338:	.....	. G . . . . .	-----GC	-----	..... -	cat
8072:	.....	. G . T . AT . .	GGCT . .	GG . GGCGCT . .	..... -	rabbit
7512:	.....	. G . . . . .	. G . A . .	AT--TT . . .	. G . . . . . -	mouse
8061:	.....	. G . . . . .	. G . A . .	A--TT . . .	. G . . . . . -	rat

	9088	9098	9108	9118	9128			
	⋮	⋮	⋮	⋮	⋮			
9079:	CAAGTAAAAAGTTTCTATTTTGGGGGTTTGCACATAAACTGCTGTGTTT					human		
9065:	..... T . . . . .				..... A	chimp		
9079:	.....	. . . . . T . . . . .			..... A	baboon		
9066:	..... T . . . . .				..... A	cow		
8374:	. . . . . GT-- . . . . .	. . . . . G . . . . .	. . . . . CT . . . . .	. . . . . C . . . . .	. . . . . G . . . . .	. . . . . T . . . . .	cat	
8121:	. . . . . GT . C . TG . . . . .	. . . . . T . G . C . CT . . . . .			. . . . . CT . . . . .		rabbit	
7554:	. . . . . GT . . . . .	. . . . . CT . . . . .	. . . . . G . . . . .	. . . . . C-T . TC . . . . .	. . . . . TG . . . . .	. . . . . T . . . . .	. . . . . A . . . . .	mouse
8103:	. . . . . GT . . . . .	. . . . . CT . . . . .	. . . . . G . C . C-T . TC . . . . .		. . . . . AT . . . . .	. . . . . A . . . . .		rat

	9138	9148	9158	9168	9178		
	⋮	⋮	⋮	⋮	⋮		
9129:	TCTGTCAGATTTTCTAATAGCAAATGGACTGTGGTGTTCCTGGAGAATG					human	
9115:	. . A . . . . .		. . . . . G . . . . .	. . . . . AG . . . . .	. . . . . T . . . . .	chimp	
9129:	.....					baboon	
9116:	. . A . . . . .		. . . . . G . . . . .	. . . . . AG . . . . .	. . . . . T . . . . .	cow	
8422:	. . A . . . . .	- . C . G . . . . .	. . . . . G . CA . .	. . . . . C . AC . .	. . . . . T . A . . . . .	cat	
8171:	. . AAA . . . . .	. . . . . G . C . C . CT . . . . .	. . . . . G . . . . .	. . . . . A . G . . . . .	. . . . . T . A . . . . .	. . . . . A . . . . .	rabbit
7603:	CTA . C . TA . . . . .	. . . . . C . CGC . G . CA . G . . . . .	. . . . . G . A . A . T . A . . . . .	. . . . . T . T . . . . .	. . . . . G . . . . .	mouse	
8152:	CTA . . . . .	. . . . . A . . . . .	. . . . . C . C . C . A . . . . .	. . . . . G . A . A . T . A . . . . .	. . . . . T . A . . . . .	. . . . . G . . . . .	rat



	9186	9196	9206	9215	9225	
9179:	CTAAT--	AATGCCAGGTTAGCAGATGGGTATTATTTGA-	AAATGAAATAT			human
9165:	.....	G.....	C.....	-.....	A.....	chimp
9179:	.....	.....	.....	.....	.....	baboon
9166:	.....	.....	C.....	-.....	A.....	cow
8471:	.....	-----	C...AGG.....	T..G.GT..C.....	C.....	cat
8221:	.....	-----	C...T.....	G...T.A...CC.		rabbit
7653:	..TC.CTCTCA..	T...TG...A.C...	C...CC-	G.A...AC.		mouse
8202:	..C.--CTCA..	G.T..CAT-	....A.....	-..G.A...AT.		rat

	9236	9246	9256	9259	
9226:	GATT-----	TTCAATTAATTTTCTTTGATTGTGTCCTA-----	G		human
9212:	....	-----	A...T..CAT..	-----	chimp
9226:	....	-----	.....	-----	baboon
9213:	....	-----	A...T..CAT..	-----	cow
8516:	....	-----	G..G..G.....	T.....	cat
8268:	....	-----	G.....C.....	CAAA.....	rabbit
7702:	....	-----	A.T.C.T..C..C--	A.A.G...ATAGATCA	mouse
8248:	....	TTAATTCAA..	T...C.....C.....	ACA.G.A.ATAGATCA	rat

	9266	9279	9289	9299	
9260:	CTAG---	TGAGCTACTTT-----	CCATATTCAGAACTTTTAAAGAAGTT		human
9246:	....	-----	.....	C...	chimp
9260:	....	-----	.....	G.....	baboon
9247:	....	-----	CA.....	.....	cow
8544:	A..	-----	CC.....C-----	.....A..	cat
8302:	..A--	AT...C...C-----	...G.....	.....T...	rabbit
7740:	...CTT...TT.T...	-----	TG...C...CAC..A.T..CTC.		mouse
8298:	...ACTT...T.T...	CAATATC.....	C.G..CAC..A.T..TTC.		rat

	9308	9318	9328	
9300:	T-ACTACGTAATTAGAAAATGTTTAAAGGTTCCCTGCTAAG-----	G----		human
9286:	..G.....	C.....	T.....	chimp
9300:	..	.....	.....	baboon
9287:	..G.....	C.....	T.....	cow
8583:	..GT..T.....	T.G.....	T..T..T...TAAAACA..	cat
8332:	..T.TTA...G..T...G...TC...TTG...AAA			rabbit
7783:	.A....C.....	AG...ATG...TC...A.GA-----		mouse
8348:	..C.....	G...AT...TC...A.GA-----		rat

	9347	9354	9364	9374	
9339:	-AAGAAAAAACCT-----	CTATGTATTCATGTTTCCCACCTC			human
9325:	.....	-----	G.....		chimp
9339:	.....	-----	.....		baboon
9326:	.....	-----	G.....		cow
8629:	..A..C...A.GTACGCTTGAAAA..	G.....	A...T...C.		cat
8374:	A..A.....	C-----	TC..A..G..T.....	T..T..	rabbit
7820:	...T.G...T..	-----	C...T.AAA..GTT.GTC.		mouse
8384:	..A..G...TT..	-----	G--..C.T.AAG.CAT..GTC.		rat

	9384	9394	9404	9414	9420	
9375:	TATCCTCCATAGCTATCCTTATTGCTTAAAATGTAGCTGGAAAA	----	TA			human
9361:	.....C.....			A.....	----	chimp
9375:	.....		T.....		----	baboon
9362:	.....C.....			A.....	----	cow
8678:	.....AA..CTA..-C..C.....			TC..A.....	----	cat
8411:	CG.....A-..AT.....			T.....	----	rabbit
7854:	--..T.T...AA..TT.....		C.....		ACAA..	mouse
8418:	--..T.T...AA..CG...C..C.....			T.T.....	--AGC.	rat

LINE2

	9430	9440	9450	9457	9467	
9421:	ATAGGTAGCCACTACAAGTTTATCCACTCATTTCATC	---	ATAATGAATGA			human
9407:	...A...C.....			----	G	chimp
9421:	...C.....			----		baboon
9408:	...A...C.....			----	G	cow
8723:	.C.T..GCT..A.TG...C....T.....			A.CATTC.....		cat
8456:	.....GCT...GT....C....GG.T..GG..	---	G.....G..-			rabbit
7902:	.....TCT.....		C.T.G...G..T..	---	G...CA.....	mouse
8464:	G....TCT..G.....C...T.T..	-----	G...CA.T..G			rat

LINE2

	9477	9487	9497	9506	9516	
9468:	ACAGGGCCTGCAATACACAAGGCACCAAGCAAG	-	GTGCAGGGAATATAGG			human
9454:	.....C.....			-..A.....		chimp
9468:	.....T.....			-.....		baboon
9455:	.....C.....			-..A.....		cow
8773:	.TG.T.T..T..C.....T.....		--.....	A..C.G..		cat
8502:	---.T..TG.T.....T.....TG..G.A..-		CA.....GC..			rabbit
7949:	.TG..A...A...C...-G.....T...A...		AAT.G..C...			mouse
8503:	.TG..A...GG.C...-...TT...T..GA-		CA.T.G..C...			rat

LINE2

	9526	9536	9546	9556	9566	
9517:	TTAGTTTCTGCCCTTACAGAATTTACAATCTGTTGGGAGGAAAAATGTTG					human
9503:	.....T...A.....T.....					chimp
9517:	.....				A...	baboon
9504:	.....T...A.....					cow
8821:	C...CC..A.-.A.G.....A.....AC...--				G.....	cat
8548:	A...GCC.....-...A..T...CA..T---A.....				C	rabbit
7998:	C...CC.....GTG.....T...A.....G.....AC..					mouse
8551:	C...CC.....GTG.....T...A.....G.....TC..					rat

9576

	9576	9595	9605	9615	
9567:	AATTTAGACACAGAGGCAC-CAAGGCTGAGTAGCTAAATGGAAGGTGAAA				human
9553:	.....T.....TG..T.....			G.....	chimp
9567:	.....			G.....	baboon
9554:	.....T.....TG..T.....			G.....	cow
8868:	.....TG..T..AT.....			G..A.G.....	cat
8594:	G-----T.....TGG.TG.....G...G...AG...C...				rabbit
8042:	-----G..T.C..T-T..AA.....				mouse
8595:	G-----A.AT.C..T-T..A.....				rat

	9625	9635	9645	9654	9664	
	⋮	⋮	⋮	⋮	⋮	
9616:	AGTGGTGAGTAGAGATTTGTCTCTGCTTCTTAATAT-CACTTAAGTGGTG					human
9603:	.....A-.....C.....					chimp
9616:	.....-.....					baboon
9604:	.....A-.....C.....					cow
8918:	G...-...C.....AG...A.GT...----					cat
8638:	G.CAC.C...A...G..T...A...C...A-..T.C.CTC--..					rabbit


	9674	9684	9694	9704	9714	
	⋮	⋮	⋮	⋮	⋮	
9665:	TTTTTGCAATACTGATAATCCTTTGCTGAGAAAAGATTTGAAGATTCTAT					human
9652:	.....G.....C...T.....					chimp
9665:	.....					baboon
9653:	.....G.....C...T.....					cow
8963:	.....A...T-----TT..G.T...A...ATG...GT...C.C					cat
8685:	.....T...CA...G...T..G...T..G...G...GC.....C					rabbit

	9724	9734	9744	9750	9760	
	⋮	⋮	⋮	⋮	⋮	
9715:	GCTGATGATCTGCTCAAATCTTCTGGAGG----AAGCCCCAGAAAGCCA					human
9702:	C.....A...-----A..					chimp
9715:	.....-----					baboon
9703:	C.....A...-----A..					cow
9007:	T---T.....C..CTA.A...-TTC...T..T...--..					cat
8735:	C..C.CT.....T.....C...A.GTTC.....AT.					rabbit


	9770	9780	9790	9800	9810	
	⋮	⋮	⋮	⋮	⋮	
9761:	AGGAAAAAGTCAAAAGAGACTTGTGGCTCCTCCTCGTCTCTTAGAGA					human
9748:	.....T.-.....					chimp
9761:	.....					baboon
9749:	.....T.-.....					cow
9051:	.TA.....A...G....					cat
9290:	.....C.C.A...G..T...CTT...C.G....					cat
8785:	.....G...TC.C.....GTGT...CT...C...A.					rabbit

	9820	9829	9839	9851	
	⋮	⋮	⋮	⋮	
9811:	CGAAGTCTGAACCTGGAG-GATGTGCCATATTG-----GAGTGATGG				human
9797:	.A..A.....-.....G.....-----A..G.....				chimp
9811:	.....-.....G.G.....-----				baboon
9798:	...A.....-.....T.G.....-----A..G.....				cow
9322:	.A..A...TT.....G..CAG..AGGG..TGACAGGAT.TG....				cat
8835:	.A..A...A.A...A..C...AGGG...-----A..CA...C				rabbit

	MIR ----->					
	9861	9871	9881	9891	9901	
	⋮	⋮	⋮	⋮	⋮	
9852:	ACAGAGCAAAGAGTGAAGGACAAACAGCCTGGGGTTCTACTTCTTCCTTT					human
9838:	.....A.....					chimp
9852:	.....					baboon
9839:	.....A.....					cow
9372:	..CC.....CA.....C.....CA...TA..C.AACCC					cat
8877:	.....G.C..G.--.....CT...CC...A.GC.A..CC					rabbit

MIR  



	9910	9920	9928	9938	9948		
9902:	-TGATT	CACCTCTT	TACAAACC	--TCTAGACATG	TTCCTTGATT	TTCTCTAG	human
9888:	-A	.....GT	.G	----	.....	.....	chimp
9902:	-A	.....G	----	.....	.....	.....	baboon
9889:	-A	.....GT	.G	----	.....	.....	cow
9422:	G	.C.GG	.C.C	.A.--T	.G	.....C	cat
8925:	A	.C.GG	.T.ACAGT	.GA.TA	.T	.....A.C.A	rabbit

MIR  


	9958	9968	9978	9988	9998			
9949:	TCCTCACCTGT	TAGAACAGGG	ACAATGACG	CCCAACTGA	ACAAACTT	CTGA	human	
9935:	.....A	.A	.....G	.....A	.....	.....	chimp	
9949:	.....	.....	.....	.....	.....	.....	baboon	
9936:	.....A	.A	.....A	.....	.....	.....	cow	
9470:	.....T	.AC.A	.....	-----A	.AA	.....	cat	
8974:	.....T	.T.TC	.AG	.A	.G	.C.A	.TA.C	rabbit
8065:	.....	.....	.....	.....	---	TG	mouse	
8614:	.....	.....	.....	.....GT	.....A	.....	rat	

	10017	10024	10032	10042										
9999:	TGGAATAAAA	-ATGCAATAGA	AAGATA---AGC	AGGGT--CTTT	GAAAGATGG	human								
9985:	C	.....G	.....	-----T	.C	.....CA	chimp							
9999:	.....	.....	.....	-----	.....	.....	baboon							
9986:	C	.....G	.....	-----C	.....	.....CA	cow							
9512:	CT	.....T	.....G.A	.G.G	---G	.....A	---CCA	cat						
9021:	.A	.C	.T	.....G	-----T	.....CCC	-----	rabbit						
8070:	.....TT	.C	.T.T	.G	.A	.CTG	.A	.A	.GC	.A	.A	.GA	.A	mouse
8628:	---	G	.C	.....C	.TA	.G	.G	---	TT	.....G	-----CG	.....	rat	

	10052	10062	10069	10078									
10043:	AGTGAGGG	GAGCTGTGC	CATGAGTGG	-----AGAG	-CCATAGGG	human							
10029:	G	.....	.....A	-----	.....	.....	chimp						
10043:	.....	.....	.....	-----	.....	.....	baboon						
10030:	G	.....	.....A	-----	.....	.....	cow						
9555:	.....CT	.....TG	.....A	-----C	.C	.....G.A	.....	cat					
9046:	.....TTG	.....	.....	-----G	.....	.....GG	.....	rabbit					
8120:	GT	.G	.G	.GG	.GCTT	.....C	.....GTGC	.....	mouse				
8662:	G	.G	.....	---G	.T	.G	.G	.....GGT	GCTTTGAGT	.C	.....GTG	.....	rat

gi|4507926|ref[NM\_003391.1] [complement]:2  


	10088	10098	10108	10118	10128							
10079:	CTGGGTGAAGG	CAGGAGACTT	ACTTCGGAG	TAGGACCCTG	CCAAAAAGGC	human						
10065:	.....	.....G	.....	.....	.....G	.....	chimp					
10079:	.....	.....	.....	.....	.....G	.....	baboon					
10066:	.....	.....G	.....	.....	.....G	.....	cow					
9592:	...CAC	.....	.....C	.....	G	.....G	.....	cat				
9071:	-----GA	.....	.....C	.A	.....G	.....	.....	rabbit				
8154:	AG	.CCAGGA	.A	.....C	.....G	.....G	.....G	.....	mouse			
8708:	AG	.CCAGGA	.....C	.....G	.....G	.....G	.....G	.....	rat			
290:	.....	.....C	.....G	.T	.AC	.C	.GG	.GC	.G	.C	.....T	fugu

gi|4507926|ref|NM\_003391.1| [complement]:2

	10138	10148	10158	10168	10178	
	⋮	⋮	⋮	⋮	⋮	
10129:	TGTGATCCCCTGTCCAGGGTGTGCAATTCCAGCGGTGCTGGCGGAACTGG					human
10115:	.....					chimp
10129:	.....					baboon
10116:	.....					cow
9642:	.....T.....G.....	.....G.....				cat
9113:	C.....	.....G.....	.....T.....	.....A.....		rabbit
8204:	.....T.....	.....G.....	.....A.....			mouse
8758:	.....G.T.....	.....G.....	.....A.....	.....A.....		rat
323:	.....G.TGT.....	.....G.....	.....C.....	.....G.T.....		fugu

gi|4507926|ref|NM\_003391.1| [complement]:2

	10188	10198	10208	10218	10228	
	⋮	⋮	⋮	⋮	⋮	
10179:	TGCTGGCATTCTGCTGTCCACTCGGCCACGCCCTGGCTAATGGCACGCAT					human
10165:	.....A.....					chimp
10179:	.....					baboon
10166:	.....C.....					cow
9692:	.....A.C.....	.....A.....	.....TA.....	.....C.....		cat
9163:	A.....C.....	.....A.....	.....A.....	.....CT.....		rabbit
8254:	..T.....C.....	.....A.....	.....A.....	.....C.....		mouse
8808:	.....C.....	.....A.....	.....A.....	.....C.....		rat
373:	.....C.....	AAA.....	G.TTTT.TC..	GGAC.CG.....	CT.....	fugu

gi|4507926|ref|NM\_003391.1| [complement]:2

	10238	10248	10258	10268	10278	
	⋮	⋮	⋮	⋮	⋮	
10229:	CACATCTGGATGTCGGTGACACAGCTGCCGCTGGCTGCTCACCAGGCCTG					human
10215:	.....T.....					chimp
10229:	.....					baboon
10216:	.....					cow
9742:	.....G.....	.....G.....	.....G.....			cat
9213:	..G.C.G.....	.....G.....	.....G.....			rabbit
8304:	.....G.....	.....G.....	.....A.....	.....C.G.....		mouse
8858:	..G.....G.....	.....G.....	.....A.....	.....G.....	.....A.....	rat
423:	..C.TC.G.CT.C.G.....	.....G.....	.....CT.T.G.....	.....C.G.....		fugu

gi|4507926|ref|NM\_003391.1| [complement]:2

	10288	10298	10308	10318	10328	
	⋮	⋮	⋮	⋮	⋮	
10279:	GCACATTATCGCACATCACCCTGGAGGAGCCACCTGTAGCTCTCATGTAC					human
10265:	.....					chimp
10279:	.....					baboon
10266:	.....					cow
9792:	.....G.A.....					cat
9263:	.....G.A.....	.....T.....				rabbit
8354:	.....G.A.....					mouse
8908:	.....G.A.....				.....C.....	rat
473:	A.TG.G.....	.....TG.....	-----	CAGG.TG.C.....		fugu

```

      10338      10348      10358      10368      10372
      |          |          |          |          |
10329: CTATAAGGGACCAACCAACACAGAGGTGAGGGCAACGTGAA-----CAG
10315: .....A.....A.....
10329: .....
10316: .....A.....
9842: ..GA.TA.-----GAAAAGC.A.A.T-----
9313: ..GGG....-----TG....AG...A.AG....G-----
8404: ..GG...A.-----GGA...CA.A.TTG.T..T..-----
8958: ..GGG....-----TGG...G.A...CA.A.TTG.T..T..-----T..
517:  ..G.GG...--G...AG.G.GG..AC.C...T....A.GGACCGTT...

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat  
fugu

```

      10381      10390      10398      10408      10418
      |          |          |          |          |
10373: GGAGGC-CTGGCTCAGTG-TTCC--TGGGAGACTAAGGAGTTCAAAGCAC
10359: A.....-...A...G...-.....
10373: .....
10360: A.....-...A...G...-C.....
9882: C..C.G-....TG.CAA.T....-CA.....A.....G
9353: AC..C.-.....C.T....-CA.....G---GAGCA.....
8444: AC...-A.A.GTGA..C.CT.-C.....---GCCCTGC.....
8998: ATG...-A...TG...-....CCCA.....---GCCCT.....--
565:  ...TC.A.C..T...G.-A...

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat  
fugu

```

      10428      10438      10448      10458      10468
      |          |          |          |          |
10419: TTTTCAAATATGAATTCCTTATCCTTCTGGTGATATTAGAAAGCAAGGGT
10405: .....G.....
10419: .....
10406: .....G.....
9929: GGC.....C.....T...G....C.....---
9397: .G.CTT.GG...G...T...A..T.....G...---TG.---
8488: .A..TG.GG.....G...T.-C...A.C...A..G..G...
9041: .AC.TG.GG.....G...GT.-C...AA.C..G...G...G...

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      10478      10488      10498      10508      10518
      |          |          |          |          |
10469: ATTTACTTTTTAATTTAGTGGAGAAACCGCAAGGCAGGCAGGCAGTGTAGTG
10455: T.....G.....A.C.....A.....
10469: ..G.....
10456: T.....G.....A.C.....A.....
9976: -----A..GG..A-----CA.....T..G.A.
9441: -----C.C.....G.A...G.---A...ACG.G.
8537: TA..TGA..G.C...C...A...A...---GGA..ACG.CC
9090: TA..TGAC.G.C...C...C...G.-----A.G.A..CC

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      10528      10538      10548      10557      10565
      |          |          |          |          |
10519: AGTGATCTTGCAAGTCATCCCCAAAATGCTGT-GATGACTGTCTG--T
10505: .....
10519: .....
10506: .....
9998: .....G.T...TC.GC.....CAGA.C-A.....G..TC.
9481: CAG...G.....C.-.G.TGTGG..GA.-.G..CT...T--
8583: .A...CGGG.TCA...CT...TCC...A.A..G...T.A...---
9131: .A...C..G.TCA...CT.--T.C...A.G...T.A...---

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	10575	10585	10595	10605	10615	
	⋮	⋮	⋮	⋮	⋮	
10566:	TGGACATGAAGCTAGGCTCTACCAGATGATGCTCTGGGCAGGGGCACAGAG					human
10551:	.....C.....G.....G.....					chimp
10566:	.....G.....					baboon
10552:	.....C.....G.....G.....					cow
10047:	.A.....C..G.C...T...G..A...C...TAGA...					cat
9527:	..C..T.....C..G.C...CA.G..C..C..T.....AGGT...					rabbit
8628:	----.CCAG...G..G.C...A...A..CT..A...AGG.....					mouse
9174:	----.CCA.....GT.G.C...A...CAAGGA..A...AGG.....					rat

	10624	10633		10655	
	⋮	⋮		⋮	
10616:	GCAA-AGTCGGCATT-TGGGGAAGTGAA--TGACGGGTA-----AGAAG				human
10601:	....-G.....C-.....A....--...T.....-----				chimp
10616:	....-G.....-.....-.....-.....-.....-.....				baboon
10602:	....-G.....C-...A...A...-...T.....-----				cow
10097:	T...-G...T...G.-CA.A...TG..G--..A...-G-----..GG.				cat
9577:	....-G.A.T...G.-...G.T...AGA..TT.CAGCCTTCC..GG.				rabbit
8674:	...G----TA....G..AA..T.G.GGCT..A...GG-----T.GG.				mouse
9220:	...GTTAGTA....G..AA..TT.G.GGCC..A...GG-----T.GG.				rat

		10667	10677	10687	10696	
		⋮	⋮	⋮	⋮	
10656:	CAACG-----TGTCTTGGGGAGAATGTGTGGAAGACTG-TTCTCAAG					human
10641:	...T-----A.....T-					chimp
10656:	.....-.....					baboon
10642:	...T-----A.....T-					cow
10136:	...T-----C..T.....CCCT.CA..AG..T-...C....					cat
9625:	A..T-----T.....G.CACC.AAGGACT.TC...C.TG.					rabbit
8714:	...ACATCTCTC...G..A.....CACAGA..GA-----TCA...					mouse
9264:	...-.....G..T.....CACAGA..GA-----TCA...					rat

	10706	10716	10726	10736	10746	
	⋮	⋮	⋮	⋮	⋮	
10697:	AAGGCTCAGATCTCAGTGACACAATGTGTCTGGACTTGGCTTTGGGGGAA					human
10682:	....T.....A.....					chimp
10697:	.....					baboon
10683:	...T.....A.....					cow
10177:	...A..T.....C...A.....AGG..CC.....-					cat
9667:	.....T.....A.....A.....					rabbit
8760:	-----C.TTG.C..A.....TCT					mouse
9301:	...A.--.C.T.....TG.C..A.....CCT.....A.....					rat

	10755	10765	10775	10782	
	⋮	⋮	⋮	⋮	
10747:	GCTGACCT-TAGAAGCTCTTCGTTCCATT-ATTTGA--CAGAATGT---				human
10732:	.....-.....T.....--.....				chimp
10747:	.....-.....T.....G..-.....				baboon
10733:	.....-.....T.....--.....				cow
10226:	.TC...T.-.				cat
10513:	.....AGC.T.C.....T..C...--CT..C..TCA				cat
9717:	..CA...C.G....C.C..AC...AT...A...--CT..A...--				rabbit
8795:	.....T..T.....T..C..AC.....-TG...TC.TA.....				mouse
9349:	.....T.....T..C..A.....-TG...TC.TAG.....				rat

	10793	10802	10812	10822	10832	
10790:	-----CTTAAAAA-	CTGTCTGTATCTGTCTAATCAACACCCGCTGGTAT				human
10776:	-----	.G.-			.T.	chimp
10790:	-----					baboon
10777:	-----	.G.-			.T.	cow
10551:	AGTGTCT	.G.-			.T.	cat
9761:	-----	.C.-			.T.	rabbit
8841:	-----	.C..C..C.A.C.G.A.	CTC.T.G.		.T..G.	mouse
9395:	-----	.GC..T-..C.A.C.G..	CT..T.G.		.T..G.	rat

	10842	10852	10862	10872	10879	
10833:	CTGATGTTACACTCTCCTCACAGACAGGCTGTTCTTTCCCTTACT				---GAA	human
10819:	.....				----	chimp
10833:	.....				----	baboon
10820:	.....				----	cow
10600:	.....	C.		T..CC.		C---A.
9804:	.....	C..G.		G..T..CA.		TAAA..
8885:	..A..C..G..T..T..A..TAA.A.CT..					A..T.AAAA..
9438:	..A..C..T..T..T..A..T..A..					---A..

	10889	10899	10908	10920		
10880:	GAGCCTTTTTAAATATTTCCA-TTTTGTAGCTC			-----TTTTTGGCTT	human	
10866:	.....	C.			-----	chimp
10880:	.....				-----	baboon
10867:	.....	C.			-----	cow
10647:	.TAT.C.			T..CC.		-----
9854:	A.AT.CC..C.			A.C..T.		-----C..A..
8935:	A.AT.C.CA..GG..T.C-			C.G..TTTTTTTTT		.....A.
9485:	..AT.C.CA..GG..T.C-			C.G..		-----T.A.

	10930	10944	10954	10964		
10921:	TTATAAAGATCCTTTGG	-----AAAAAATCCTTCTATTGTTATTAAGG			human	
10907:	.....				-----	chimp
10921:	.....				-----	baboon
10908:	.....				-----	cow
10689:	....G..A.				-----	cat
9895:	....GG.A.A.				-----	rabbit
8984:	....G.A.CTT.G.GAG	---		T..CT.		C.CCA
9526:	G....G.A..TT..G..GATTAA.				-----GC..C..C.C.A	rat

	10974	10984	10994	11004	11014	
10965:	ACACTAAATGTTTGGGAAGAATCAAACAGTGCTATAACTCCATAAAGTACT					human
10951:	.....			T..G.		chimp
10965:	.....			T..G.		baboon
10952:	.....			T..G.		cow
10733:	.....			T..G.		cat
9939:	.....			A..T..G.		rabbit
9031:	G.....A..A..A..--T..CAT..G.					mouse
9571:	G....C..A..A..A..----CAT..GT.					rat



	11024	11034	11040	11050	11060		
11015:	TTTTGAAAAGAAACTTTAACA	-----	AAAATTACATCATCATCTCTACCC			human	
11001:	.....	----	.....			chimp	
11015:	.....	----	.....			baboon	
11002:	.....	----	.....			cow	
10782:	.....	----	.....			cat	
9989:	.....	----	.....	C		rabbit	
9079:	.....	AAA-	C	T	GG	mouse	
9617:	.....	G	AAAG	G	T	TTG	rat

	11070	11080	11090	11100	11109		
11061:	AGATGTTCTCTATTAGTCGTGAAATGTTT	AGAAAGGTACC	-TTTTATATA			human	
11047:	.....		-			chimp	
11061:	.....		-			baboon	
11048:	.....		-			cow	
10828:	.....	T		T		cat	
10035:	.....	T		-		rabbit	
9128:	.....	C	T	G	G	C	mouse
9667:	.....	C	C	-	A	A	rat

	11119	11129	11138	11148	11158		
11110:	ACCCAAGCTGCCATAGGTGTCTTTTG-	AAGCGATCAAACAAGGAGAATGT				human	
11096:	.....		-			chimp	
11110:	.....		-			baboon	
11097:	.....		-			cow	
10878:	.....		-			cat	
10084:	.....		-	G		rabbit	
9177:	.....	T	A	A	T	C	mouse
9715:	.....	T	T	AA	A	T	rat

	11167	11177	11187	11197	11207		
11159:	CTTTTT-CTTGTATTTTCATTATTTT	TATATGATCATAAAATCGTTACAGC				human	
11145:	.....		-			chimp	
11159:	.....		-			baboon	
11146:	.....		-			cow	
10927:	.....		-			cat	
10133:	.....		-		C	rabbit	
9227:	.....	TT	C	CC	A	A	mouse
9765:	.....	C	-	T	CT	G	rat

	11217	11226	11236	11246	11256	
11208:	TGTGACTTCCAAAAA-	ATATATTTAAGTGACAGCTGAGAGACAATGTGAC				human
11194:	.....		-			chimp
11208:	.....		-			baboon
11195:	.....		-			cow
10976:	.....		-			cat
10182:	.....		-			rabbit
9277:	.....	A			G	mouse
9812:	.....	A	T	G	G	rat

	11266	11276	11286	11296	11306	
11257:	AAAAAGCCTGAGCAATAAATAATGTTTATACACCCATGGAAACAGAAATA					human
11243:	.....C.....					chimp
11257:	.....C.....					baboon
11244:	.....C.....					cow
11025:	.....G.....TG.....					cat
10231:	.....G.....G					rabbit
9325:	...T...C-...GG.....A.....					mouse
9862:	...T...C-...G.....A...AA.....GG..					rat

	11316	11325	11335	11345	11355	
11307:	GTCATTTTATTG-AAAAATGGTCAGTCTGATAAATCAATCTTTGATCCTG					human
11293:	.....-.....					chimp
11307:	.....-.....					baboon
11294:	.....-.....					cow
11075:	.....-.....C.....A					cat
10281:	.....-...C.....					rabbit
9374:	A.....A.....A.....G.....					mouse
9911:	A.....-.....					rat

	11365	11375	11384	11394	11404	
11356:	TGTCAGCAATGTCAAGGCTAAACGCC-TCCCTGTTCAAAGCCGGCTTAGG					human
11342:	.....-.....					chimp
11356:	.....-.....					baboon
11343:	.....-.....					cow
11124:	.....-TT.....-					cat
10330:	.....-T.....					rabbit
9424:	.....G..G...C...G...-T.A.....-AT...A					mouse
9960:	.....G...C...G...T.T...C..C...-AA.....					rat

	11417	11427	11443	
11405:	AAGGAATTG-----AACCCCTCTTCCCATCAGCG----CATTGCCTTG			human
11391:	.....-----.....C			chimp
11405:	.....-----.....			baboon
11392:	.....-----.....			cow
11172:	.....-----A..CTTT.T.....			cat
10379:	G.....-----T.T...C...ACT--T.....A			rabbit
9471:	...GC..ACCCCC.C...G...A...T-----T.--.C..			mouse
10009:	...TCTC..-----G...TG...A...G-----T.....--			rat

	11453	11463	11473	11483	11492	
11444:	CTCCTTTGAAGAGCTCCAGTGTCTTCCTAAAAATTTCCCTGCTCTAGT-C					human
11430:	.....C...T.....A-					chimp
11444:	.....-.....					baboon
11431:	.....C.....A-					cow
11215:	.....-..G.....-G.....-					cat
10420:	.C.....G.G...T..A.....G..G.....T..C...-					rabbit
9515:	T...C.C.G.CAT..TG.AA.-----T.G.C.AT..A.T.T..C.					mouse
10046:	T.T..C.C.G.CA..TG.GA.-----T.G.C.A..A.T.T..C.					rat

```

      11498      11508      11512      11522      11532
      |         |         |         |         |
11493: TGTA----ATTAGCTGAGA-----CCCCTTACCAGATTCTTTAAAAAT
11479: .....C.G.....G.....
11493: .....G.....
11480: .....G.....
11261: .T.----.G..A..CTTCTTA.TT.GG.....C.A
10469: .T.C----.C.GG.....-GGCTTA.TT.G...C.--G...C
 9561: ...CTGT...G.T.A..-TCCTTA..G..GT..A.CA.---...GC
10092: ...CTCT...G.....

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      11542
      |
11533: TAGCCCACGATAACGGG-----
11519: .....A.....
11533: .....A.....
11520: .....A.....
11307: G...T..T...T...-----
10512: C..AG.C.....GCA.-----
 9607: AC..G.G..CG.G..T.TGTGTATGTGTGTGTGTGTGTGTGTGGCCAA

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse

```

      11559      11571      11581      11591
      |         |         |         |
11550: TGTCTCTGAATC-----AATATTTTAATATCTGTTCTGAAACTTTTA
11536: .C.....
11550: .....
11537: .C.....
11324: .CCT.....T-----G.....G.....A..
10529: .C.T....G.....GA...C.G.....C..
 9657: .A.T....TGTATCAG...C.....A..G...-
10241: .A.T....GCTATCAG...C.....C...G...-

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      11601      11610      11619      11628      11638
      |         |         |         |         |
11592: GGTGCAAGGAAATTA-CAGGGC-TATCAACT-CTATCTCTTTCCAAGACC
11578: .....-.....-.....-.....
11592: .....-.....-.....-.....
11579: .....-.....-.....-.....
11366: ...T....CG...-..AC.T.A.....-C.C.....T...T.
10571: CCG.TG....C..TC..C..A-ACCT....-C.....C..TG...T.
 9706: T..A...A..G..T-..A..-CAG....-C.....T.C..GT.
10290: T..A...A..G..T-..A.T-.TGG....C.C.....GT.

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      11648      11658      11668      11678      11688
      |         |         |         |         |
11639: AGAAAGTCGGCAGATGGAGAACGGTTTCTAGATGGGGAGGGAATCTGCCT
11625: .....A.A..A.....
11639: .....A.....A.....
11626: .....A.....A.....
11414: ...G.AA..G.A.....-----T.....T...
10619: ..G.....G.....G.C.GA.....GC.....CA..G.....
 9753: .....T.AG.....-G..A.....T..C..A.TG.AC.--
10338: ..G...T.AT....A..-GT.A.....GA..C..A.T..G.A.--

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

```

      11698      11699      11709      11719
      |         |         |         |
11689: TTGGAACTTT-----TAGCGACCTGGTATGGTTCAACAT-----
11675: .....T.....
11689: .....T.....
11676: .....T.....
11444: .....GAAGGACGC...-.....T..CATA.....TCTGCC
10669: .....CCCCGATGC..A-.....CC.C.....GG.-----
 9800: .....
10385: .....A-----

```

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	11731	11741	11751	11765	
11723:	-TCCATCACTATGCAAAAATAAATAAATAAATTG	-----	CAGACCAACG		human
11709:	.....	-----	.....	A.	chimp
11723:	.....	-----	.....		baboon
11710:	.....	-----	.....	A.	cow
11493:	C...T.TG.....	-----C.....	C.....AA-----		cat
10711:	..A.....	-----	.....AAAGGCATT..GT..G..		rabbit
9802:	-----	-----	.....G.....CA-----	..T.T.CG.C	mouse
10387:	-----	-----	.....G.....CA-----	T.C.T..GTA	rat

	11772	11782	11791	11807	
11766:	---TACAAAGGAAAGCAGCAA-AGTTACTCTTCGCGGG	-----	GACGGTTG		human
11748:	-----	-----	.....T.....	-----	chimp
11766:	-----	-----	.....T.....	-----	baboon
11749:	-----	-----	.....T.....	-----	cow
11529:	---G.....	-----	.....T.G..TGATT.T.AG.T		cat
10755:	CCC.....	CCGC.G.TGG-	.....T.G..T-----	.CG...T	rabbit
9821:	---.T.G.-.C.....	-----	.....A.C.TAG..A-----	..A..T	mouse
10406:	---...G.-.C..TG..GC.....	-----	.....A.C.TAG.AA-----	..A..T	rat

	11817	11827	11837	11847	11857	
11808:	TGAACAAGGTAACATCTTAGAGACAGACCCCGGGTCTGTAGCTTTGCAT					human
11790:	.....G.....	-----	.....T.--..GT.....		chimp	
11808:	.....	-----	.....		baboon	
11791:	.....G.....	-----	.....--A..GT.....		cow	
11572:	.....G...G.....	-----	.....C...T..G...G.T...C.AG.		cat	
10800:	C.G...G..	-----	.....G...G...G		rabbit	
9860:	...G..G...G...AA.G.---	GC...T.A.TCC.A...	T.....		mouse	
10447:	...G..G...GT..AA.G.---	GT...A.TCC.A...	T...A...		rat	

	11867	11877	11887	11897	11907	
11858:	TAAAGCCATAGTCTCTAACTGGAGGCAGCAAAATGTTCTTCCGCCCACT					human
11838:	.....	.....C.....				chimp
11858:	.....T..G.....					baboon
11839:	.....	.....C.....				cow
11618:	...G.TGG.....	.....C...C.....	-----	GGC.....		cat
10823:	A..G..G.C...G...C...G.....	GGGC.....	T...T.G..		rabbit	
9906:	CT.G..A.....	.....C.....	-----	T..TT..T.		mouse
10493:	CC.GA.A...T.....	.....C.....	-----	T..TT..T.		rat

	11917	11924	11937	11947	
11908:	GGGGTGAACC---	TGGAATGTGGAAGG	-----	ACGGGAAATAATACAA	human
11888:	.....	-----	-----	-----	chimp
11908:	.....	-----	-----	-----	baboon
11889:	.....	-----	-----	-----	cow
11664:	.....G.ATTA.....	-----	-----	G.....	cat
10873:	..AA.G...G.ATTA.....	.....G.....	-----	-----	rabbit
9941:	A.....G.GCGA.....	.....C.....	-----	C.A...G.....	mouse
10528:	.....G.ACCA..C...C.....	GAAGGAC.A.A.....	G.G...		rat

11948: AGTCACACGCTTTAGGTTCTACAACCTCCTGACTGGCTGAATTGGCCCGTC human  
11928: .A.....G.....C..... chimp  
11948: ..... baboon  
11929: .A.....G.....C..... cow  
11707: .A...T...G.G...G.GT.G...T.....C.A.....A.. cat  
10912: -----GT.G.G....C.....C.....-...A..C. rabbit  
9984: .A.....G...A.....-A..A.C...G.C.----- mouse  
10578: .AC..G.G...CC.....T.....-A.TA.C...GG.----- rat

11998: GATTTACCTTGAGGCAGTTTTGGCGGGGTGGGGCTGGGATGGGGGAGGC human  
11978: .....A.....G...GC..... chimp  
11998: ..... baboon  
11979: .....A.....G...GC..... cow  
11757: .G...T.....TA...G.A-----G...G.....A. cat  
10955: .GC...T..CC.....-.....GA.A.AAAAA.G.....A.. rabbit  
10025: .GC.CT.....A.....T.---AA.TC.TGG.T.TG..... mouse  
10619: .....CT.....---.CC...-----A.....T... rat

12048: GGTTGTAGTTTTCAAGGTGAATTTACACACACACACACACACACACAC human  
12024: ..... chimp  
12048: ..... baboon  
12025: ..... cow  
11795: .....TT..... cat  
11000: A.A.....T...GT..G.GT..... rabbit  
10071: A.....C..... mouse  
10652: A.....T.....C..... rat

12098: ACACACACAC-----GTCTGTGC--TAG-AGCTG human  
12074: .....ACAC----- chimp  
12098: .....ACACACACACACACAC----- baboon  
12075: .....ACACACACACACACACAC----- cow  
11845: .....ACACACACAC-----C.....AAC...A. cat  
11050: .....ACAC-----AC.CA....G..... rabbit  
10121: .....ACACACACACACACACACACA.AC...--...A..T.A mouse  
10702: .....ACACACACACACACAC-----CC.GC...--...AG.A rat

12124: GAGACCAGGCTAGCACGTCTCTCAACAGGATAAGAAATTGGCTGATTTTG human  
12104: .....G.....G..... chimp  
12140: ..... baboon  
12121: .....G.....G..... cow  
11883: .....C.....GT.....T..G..... cat  
11079: ...A.T...G..G..G...C.....C.C..... rabbit  
10169: C..CT.....A.T...GTG.A...GT.....C..... mouse  
10744: C..CT...CA...A.T...GTG.A...GT.....C..... rat

	12183	12193	12203	12213	12223	
12174:	CTGTGCTCAGCTGGATCCAAATAAACCAAACATCGGAGCTCTCATTTGA					human
12154:	.....A.....G					chimp
12190:	.....					baboon
12171:	.....A.....G					cow
11933:	.....C.....C.....					cat
11129:	.G.....C.....C.....C.A.G.....AC.					rabbit
10219:	.....A.....C.....C.-G.G.....TAA.T.C.....-					mouse
10794:	.....A.....C.....C.-.....TAA.C.....-					rat

	12232	12241	12251	12261	
12224:	-GGGGGAATGTGG-----TTTTATGGAGTTGTCAAAGCTGAAAT				human
12204:	T.....C.....				chimp
12240:	-----				baboon
12221:	T.....				cow
11983:	-.AA.T.....GTTA-----T.....G.....				cat
11179:	G.....C.....ATTTTTTTTTTTT.....T.....G				rabbit
10267:	-T.....C.....AAT-----G.T.....A.....				mouse
10842:	-T.....C.....AAT-----G.T.....A.....				rat

	12271	12287	12302	
12262:	GATCTTCTGGGAAAAGA----GAAGGGGCTCACCATGGG----GCGATA			human
12243:	.....A.....			chimp
12278:	-----G.....			baboon
12260:	.....C.....C.....			cow
12025:	.TCT.C.GA.....CAAAG.....G.GGC.....G.G			cat
11229:	.G.....C.C.G.....C----T.....A.GGG.....A.C.			rabbit
10307:	.GGT.T.A.....C----A.....T.G.T.A.ATGCT.T.....			mouse
10882:	.GGT.T.A.....C----AG.....T.G.T.A.ATGCT.T.TC.			rat

	12310	12320	12330	12340	12350	
12303:	--AGAGGGCAGTAGCCAGGGTTCGGGCCAGAATCCGAGACTGCTGCGGCC					human
12284:	--.....C.....					chimp
12319:	-----					baboon
12301:	-----					cow
12070:	CG.....A..C..TG.....T..A.GG.....T-C..TG.....T.....					cat
11270:	GC..C.C...C..-TG.....TG.....-C.G.AT.C.T.T.T					rabbit
10353:	-----T.....TTT.....ACA.....C.G.A.T					mouse
10928:	-----A.....TT.....ACA.....CAG.A.T					rat

	12360	12367	12377	12387	12396	
12351:	GCGGGGGAACG---CAGCCAGGAAGGGTCTATGTGGCCAA-TGCGGTCCC					human
12332:	.....A.....A.....					chimp
12367:	.....A.....					baboon
12349:	.....A.....A.....					cow
12119:	..-..A.G.---CA.G.C.A.....C.....T.GT...T.....					cat
11313:	.T...C.G.CCA.C...TC.C...A...-G.A.CG-C.....					rabbit
10390:	---A.T-----G.....C.AC.A..G-AG.....					mouse
10965:	---A.A.-----G.....C.AG.A..G-AG...T.....					rat

12406 12415 12418 12428 12438

12397: CATTCCGATCTCCAAAAT-CCC-----CCGCGCCCGTGCGCGTGGACT human  
 12378: ..C.....A.....GT..C.....T... chimp  
 12413: .....C..... baboon  
 12395: ..C.....A.....GT..C.....T... cow  
 12165: G.C...CG.....C.....T..A...A.A..... cat  
 11360: .GC...CC....CTTC.-...-----AA.T.T...C.T-T.G.... rabbit  
 10431: ..C...C.....A-T..ATCAGCA.....A.AT...G..... mouse  
 11006: ..C...C.....A-T..ATCAGCA.....A.AT...GA..... rat

gi|4507926|ref|NM\_003391.1| [complement]:1

12448 12458 12468 12478 12488

12439: TACCACCATGAAGAGTTGACCTCGGGGGTGAGCCAGGTCAAGAGCAGAGG human  
 12421: ..... chimp  
 12456: ..... baboon  
 12438: ..... cow  
 12208: .....C.....A.....G... cat  
 11401: .....C.....C..... rabbit  
 10480: .....C.....A..... mouse  
 11055: .....C.....A..... rat

gi|4507926|ref|NM\_003391.1| [complement]:1

12498 12508 12518 12528 12538

12489: GAGCCAGAGCCAGATTCCACCGAGAGGGGCGTTCATATTAACCCCTTGC human  
 12471: ..... chimp  
 12506: ..... baboon  
 12488: ..... cow  
 12258: .....G..... cat  
 11451: .....CC..... rabbit  
 10530: .....A..... mouse  
 11105: .....A..... rat

gi|4507926|ref|NM\_003391.1| [complement]:1

12548 12558 12568 12578 12588

12539: GTCTGCATCAGGTCAGACTCCGTGTGCGGGCGCCATGCGTGCCAGAGCA human  
 12521: ..... chimp  
 12556: ..... baboon  
 12538: ..... cow  
 12308: ..C.....C..... cat  
 11501: ..C.....G.G..... rabbit  
 10580: ..A.....G..... mouse  
 11155: ..A.....G..... rat

gi|4507926|ref|NM\_003391.1| [complement]:1

12598 12608 12618 12628 12638

12589: GAAGCGCTCAGCTCCGGGAGCGCCTCGTCACGGCCGCGCGCCTCGCCG human  
 12571: ..... chimp  
 12606: ..... baboon  
 12588: ..... cow  
 12358: .....G.....A..... cat  
 11551: .....G..... rabbit  
 10630: .....T.....T..... mouse  
 11205: .....T.....T..... rat

gi|4507926|ref|NM\_003391.1| [complement]:1

	12648	12654	12664	12673	12683	
	↓	↓	↓	↓	↓	
12639:	CGCCCCCGCCCC	----	CCGCTCGCGTCTGC	-GACGAGTGGCGAGACTCGC		human
12621:	.....	-----	.....	-.....		chimp
12656:	.....	-----	.....	-.....		baboon
12638:	.....	-----	.....	-A.....		cow
12408:	.....	-----	.....	-G.....		cat
11596:	.....	CC--T.....	.....	G.G.....	CA.A.....	rabbit
10678:	.....	CCCG.....	.....	-G.T.....	T.....	mouse
11253:	.....	CCCG.....	.....	-G.T.....	T.....	rat

gi|4507926|ref|NM\_003391.1| [complement]:1

	12693	12703	12713	12723	12733	
	↓	↓	↓	↓	↓	
12684:	TGATAAAGTTTCAAACGATGGGCCAGCGAGCGATAAAGGCCAGCCCGGA					human
12666:	.....	.....	G.....	.....	G.....	chimp
12701:	.....	.....	G.....	.....	G.....	baboon
12683:	.....	.....	G.....	.....	G.....	cow
12451:	.....	C.CCA.....	GGG.....	.....	T.G.....	cat
11644:	.....	A.CAA.....	G.G.....	.....	-G.....	rabbit
10727:	.....	A.C.A.....	.....	.....	G.....	mouse
11302:	.....	A.C.A.....	.....	G.....	G.....	rat

gi|4507926|ref|NM\_003391.1| [complement]:1

	12743	12753	12763	12773	12783	
	↓	↓	↓	↓	↓	
12734:	CCGCCTCGCCACAGCCCAATTCCCCAGGCGCAGCGAGCGCCTGCAGCCC					human
12716:	.....	.....	G.....	.....		chimp
12751:	.....	.....	.....	.....		baboon
12733:	.....	.....	G.....	.....		cow
12501:	.....	.....	T.....	T.GG.....		cat
11693:	.....	.....	.....	-----		rabbit
10777:	.....	-.....	A.A.T.....	AG.....		mouse
11352:	.....	-.....	T.....	AG.....		rat

gi|4507926|ref|NM\_003391.1| [complement]:1

	12795	12805	12814	12824		
	↓	↓	↓	↓		
12784:	GA-----AAGCTCTGCGCGCCTCCCGCGCGCCCC-GTCCGCTCTGCT				human	
12766:	.....	.....	T.....	A.....		chimp
12801:	.....	.....	T.....	.....		baboon
12783:	.....	.....	T.....	.....		cow
12551:	GAGCTCTCG.....	.....	A.....	T.G.....		cat
11727:	-----G-----	G.CG.....	A.....	A.....	A.A.....	rabbit
10826:	C-----G.....	TT.....	A.....	T-.....	TT.C.T.....	mouse
11401:	C-----G.....	T.....	A.....	T-.....	TT.G.T.....	rat

gi|4507926|ref|NM\_003391.1| [complement]:1

	12829	12835	12845			
	↓	↓	↓			
12825:	-----CCCCTCC-----	GGGCGCAGCCGAGGGGGGTG-CTGCGC-----		human		
12808:	.....	.....	.....	.....	chimp	
12843:	.....	.....	.....	.....	baboon	
12825:	.....	.....	.....	.....	cow	
12601:	.....	G.TGCT.....	A.....	-AG.....	cat	
11762:	CTGCA.....	A-----	CA.....	T-T.....	C-----	rabbit
10866:	-----	A-----	TA.A.A.....	C.C.A.....	-----	mouse
11441:	-----	G-----	A.....	T.A.A.A.....	C.C.....	rat



	12869	12879	12889	12899	12909	
	:	:	:	:	:	
12861:	-CTGGCGGGGTGGGGAGAAACGCGGGGTTTTAGACACGGGTGCATGAAA					human
12844:	-.....G.....A.....					chimp
12879:	-.....					baboon
12861:	-.....G.....A.....					cow
12641:	-G..T...CG...---G...-.....C...A...G...C.G					cat
11806:	GTG..T.....--GGG.A.A...C.CGC..G..A...G.CAG..					rabbit
10903:	-G.....C.TA.-.GGG.A.T.....TTG.G.A...G.A...					mouse
11478:	-G.....C.T.-.GGG.A.T.....T.G.G.A...G.A...					rat

	12919	12929	12939	12949	12958	
	:	:	:	:	:	
12910:	TGATGGCAAGAGATGTCTGGGGATGAGGTGAGGCGGGGAAGGGGGA-ACA					human
12893:	.....-...					chimp
12928:	.....-...					baboon
12910:	.....A.....-...					cow
12685:	.....G.....A.....A...-G..					cat
11854:	G...T..C..G..C.....GC...--G.....G.AAA...-G..					rabbit
10951:	C.....C.A..CC..G.....A.G...A.A.G...T.A.C.A.					mouse
11526:	G.....A...CC..G.....A.GA..AAA.G...TT..CTA.					rat

	12968	12985	12995	13004	
	:	:	:	:	
12959:	TCGCTGCATGGTTACGAGC---ACACGCGAATACAGGAACC-TTTAGGGA				human
12942:	C.....C.....				chimp
12977:	C.....-.....				baboon
12959:	C...A.....C.....				cow
12734:	C.T...G...CCTT.G...---.C...G.GGG...C...-...C...				cat
11901:	C-----G-----G.....				rabbit
11001:	C.T.G.AG...CCCG...A--...TAGAGGC.A.A.C...-...T...				mouse
11576:	C.T.G.AG...CCCG...ATC.T.GAGAGGC.A.T.C...T...T...				rat

	13014	13024	13035	13045	
	:	:	:	:	
13005:	AGCTCCAGGCCAAAGAGCATCCGTGGG-----CTCTCGGAGCGTGC				human
12988:	....-G..G.....G.A.....C..				chimp
13023:	.....C..				baboon
13005:	....-G..G.....G.A.....C..				cow
12780:	.....T..T...-.....A.....-GCTCCTG.CACA...C...-T				cat
11915:	..C.GGA..A...AGC..G.--.CA.....C.CA.....C..				rabbit
11048:	..T...TA...T..TACA.A..AT.TTAGGGCCA.CAC...A.C.AG				mouse
11626:	..T...TA...G...TCA.A...CTAGTGCCA.CAC.C..A...---				rat

	13057	13067	13074	13082	
	:	:	:	:	
13046:	GTTC-----CGGATTGCCGAGGCCATCCG---CTGGCAAAC--AAGT				human
13027:	.G.....				chimp
13064:	.....				baboon
13044:	.G.....				cow
12825:	.C..CAGATAGG...A.G.....T.C..T---.C...C..AG...				cat
11954:	A...-----A.G.....T.C...---A...C..AGC...				rabbit
11098:	.C...-----ACT...T.A...T.AGA.TTT...CT...TG.G..				mouse
11673:	-----TA.GC...A...GT.G.A.TTT...T...TTG...				rat

	13089	13099	13109	13115	13125	
13083:	CCCT---	GAGCGT	GCAATGT	GAGGAAAC	GAGGA----	AGGGGGCCAGGGG
13064:	.....	----	G..C.....	----	.....	TG.....
13101:	.....	----	.....	----	.....	A...
13081:	.....	----	G..C.....	----	.....	TG.....
12872:	.T.C---	...A.....	...G.A...	...T..A.G	-----	...A..
11993:	...CAAG...	AG..G.CA.	G.A.CGT...	G-----	-----	CA...
11140:	T.-----	...AA.-	TC...T.T.	GG..T.G	-----	GA...
11711:	.....	----	T..A.....	A.CGT.--	G..G...	TTTGG.T...TGG.T..

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13135	13145	13155	13165	13175	
13126:	ATAAGGAGAT	TACTATGCAT	GGGATACAAGAAT	CCAGAGAT	GATTCTCAA	
13107:	.....	.....	.....	.....	.....	.....
13144:	G.....	.....	.....	.....	.....	.....
13124:	.....	.....	.....	.....	.....	.....
12907:	..G.....	A...G..T	CA...G..A	.....G.....	.....T...	.....
12031:	.CTGCA.C	GG...GG.TGC	A...G.C.....	-----	-----	-----
11172:	G.G.....	A.T.GCC...	A....A....	AA..A.A....	TC...	.....
11756:	G.G.....	A.T.GCC...	A.....C..	A..A.A....	TC...	.....

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13185	13195	13205	13215	13225	
13176:	CTCATTGCTTCGCTTCTCTCCCTGAAGCTGGGATGAAGAGCTAGCACTTG					
13157:	.....	.....	.....	.....	.....	.....
13194:	.....	.....	.....	.....	.....	.....
13174:	.....	.....	.....	.....	.....	.....
12957:	.....	C.....	-A...CAAA	G.....G..	----	A
12067:	.....	G..C.....	CCA.....	A.G.TCAA-	-----	-----
11222:	.....	T.-----	AGCA.....	GAT...TA	---	T.A..
11806:	.C.....	TC-----	AGCA....	A.GAT.	-----	T.A..

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13235	13245	13256	13266	
13226:	TAAATTTGGAGCTGCCGCGTCT	-----	ATGCAGGGCAAGGTTAGGG		
13207:	.....	.....	.....	.....	.....
13244:	.....	.....	.....	.....	.....
13224:	.....	.....	.....	.....	.....
13002:	G.G.....	G.....	A..AG	-----	T..C.....G...
12116:	.G.....	.....	.....	.....	.....G...
11258:	GG...G..C...	AT...GACCACCCAG.	TCT.A.C...	GA.A	.....
11838:	GG...G..CT...	AA.T...GATCACTCAC.	TTCT.A.C...	GA.A	.....

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13286	13293	13303	
13267:	A----	GG---	GGCCAGG---	CCTCTGCGAAAT---
13248:	.....	.....	.....	A.....
13285:	.....	.....	.....	.....
13265:	.....	.....	.....	A.....
13043:	.GGGC.---	.....	.....	A.G...GAA.....C...
12141:	.GGGA.---	...TG..CCA...	C.G...AAA.....	-..A..C.A.
11308:	.....	AAA.C.T...	----.C.--GA...	GAA....A-...CCC.
11888:	.....	TTA.C.T...	----.G....GAA....	A-...CCC.

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13312	13322	13332	13342	13352	
13304:	ATTCTT	TGGTCTGGGCTTAAATACAGAGCCCATAGGGAGGGGAACTTG				human
13285:	.....	-.....T.....			T.....	chimp
13322:	.....	-.....T.....				baboon
13302:	.....	-.....T.....C.....				cow
13086:	.....	-CA.A.....A.....T.....C.....T.GC.....T.....G.C--				cat
12187:	G.....	C.T...T.....CC.....A.T.CAGAA..A...G.CGA				rabbit
11348:	.....	-GT...----.A..C..GA..G.-----A.TA...G.----				mouse
11928:	.....	-----T.TTC.A..C..GA..G.-----AAT.A...----				rat

	13362	13372	13382	13391	13401	
13353:	GAGGGTCCATGACCCTCGGGACCTAACCCA-GCAGTATCTGCCAAAGCAC					human
13334:	.....	A.....			-.....T..	chimp
13371:	.....	.....			-.....	baboon
13351:	.....	A.....			-.....T..	cow
13133:	.G.A.....	C.....C.....G..ACC..A.....TGT				cat
12237:	..A.CCTGGA.T...CG...T..C-....-...C.C..A.---..G.					rabbit
11381:	.....G.TGG....AG.A..T..C.AG..-A...T..A.T.T...G.					mouse
11962:	.....G.TGG....AG.A..T..C.AGT.-A...T...T.T...G.					rat

	13410	13420	13430	13440	13450	
13402:	CC-AGGAAAGATGCAGTTTTTACGCACACCCAGCTCCTCTCCGGAGCTGC					human
13383:	..-.....				T.....	chimp
13420:	..-.....				T.....	baboon
13400:	..-.....				T.....	cow
13183:	.T-G..G.....G.....T...T.....C...C..AAT					cat
12282:	A.TG..G.CC.C.AGA...C..A.....T..C.....					rabbit
11430:	..TT..G.....TG.C.....T.....A.....-TTAT...T					mouse
12011:	..TT..G...G...G.C.....T.....C.-.TAAC...T					rat

	13456	13466	13476	13486	13496	
13451:	----GGAGCGCAAAGATCACATAGAGAGGAACCGAGGCAGCCAGGCGTT					human
13432:	----.....	C.....				chimp
13469:	----.....					baboon
13449:	----.....	CC.....			T.....	cow
13232:	----.....	C.....G.....A.....GCA.A.C.				cat
12332:	----A.....-CG...G..C..G...G-----G..A..C					rabbit
11479:	TGAG...T...T...G.--...G..CT..T.....TA.C					mouse
12060:	TGAG...T...T.....--...G..CTT.T.....T.....----					rat

	13506	13517	13527	13537		
13497:	CGCCGGGGGTGTGCGCCCT-----TGCACCTCCTGCCGCCTGGGCG				human	
13478:	.....	-----C.....C.....				chimp
13515:	.....	-----C.....C.....				baboon
13495:	...C.....	-----C.....C.....				cow
13278:	-.....C.....T.C-----AA.G.-----G.					cat
12366:	.A..CA.A.GC.....A-GCGCTGGCC.....T.C..A.....T.					rabbit
11527:	TAT.-----T...GGCTTGAC...T...-C.A.G.A..T.					mouse
12104:	---.A..TA.CC..T...GACGTGGAC...T...-C.A..A..CT.					rat

	13547		13560	13570	
13538:	CTCAGCCTGTGCGCCTT	-----	GTGGAGGTTAAGGGAC		human
13519:	.....	-----	.....		chimp
13556:	.....	-----	.....		baboon
13536:	.....	-----	.....		cow
13304:	TCAC...T.....	-----	C..G..A.GA....		cat
12415:	..GGAG...C.T.A..	GGTGGGGCGGGGGTAGGGA..	G...CG.....		rabbit
11569:	TC..A.....T..G----	GCTGAAGTACA-	...A.AA.AC..T...		mouse
12150:	TC..A.....A...G----	GCCGAAGTACA-	...A.A..AC..T...		rat

	13580	13590	13608	13618	
13571:	CCTCGGTCC	TGGACCTGGGCCCCCGCCC	--AGCCAAGAGAGAGGGGCTTG		human
13552:	.....	---	.....C.		chimp
13589:	.....	---	.....		baboon
13569:	.....	---	.....C.		cow
13337:	..G.....T.....	A.AG.....	----A...CA		cat
12465:	...A.C...A.....	AG..AG--...	C..C.....		rabbit
11613:	G.GG.AC.TC.....	T...TA.AG--..	TAG...T---		mouse
12194:	A.GG.ACTTC.....	T...T...TATAG--..	TAG.T.T---		rat

	13627	13637	13647	13657	13667	
13619:	GG-CCCGCGGGTGGAGCATT	TTTTGAGCAGTAGCTGGCTTGTAGCCGCGCCG				human
13600:	..-.....	.....	.....	A.....		chimp
13637:	..-.....	.....	.....	.....		baboon
13617:	..-.....	.....	.....	.....		cow
13383:	A.-.T.....	C..A.....	C.A.....	C.....		cat
12512:	..-..T.....	C.....	C.CAG...C.A.....	G..CG...C..G.		rabbit
11658:	..-..AA.....	C.....	A...C.A.....	C.A...TT.TG.		mouse
12239:	..C...A.....	C...A...C.A...A...	A...A...T..TG.		rat	

	13677	13687	13697	13707	13717	
13668:	TTTATCACCGGAAAGGAAGGAAGACCAGGA	ACTCGTGGCGGCCGTGAACT				human
13649:	.....	.....	.....	.....		chimp
13686:	.....	.....	.....	.....		baboon
13666:	.....	.....	.....	.....		cow
13432:	.....	.....	.....	.....		cat
12560:	.....	.....	ACA	.....		rabbit
11707:	.....	---C.....	TACA...A..T.....			mouse
12289:	.....	---C.....	TACA...A..T.....			rat

	13727	13737	13747	13757	13760	
13718:	GTTCCATTGCTCTTTTCC	TGGGGCGGAGGGACTCACTGCC	-----	CGC		human
13699:	.....	T.....	-----	.....		chimp
13736:	.....	.....	-----	.....		baboon
13716:	.....	T.....	-----	.....		cow
13482:	.....	C.....	T.....	C.G.C.....		cat
12610:	.....	C.....	.....	CAGTC.....		rabbit
11754:	.....	.....	.....	C.C...C...ACCACCA.TA		mouse
12336:	.....	.....	G...G.GG...CA..	-----A.CA		rat

	13769	13779	13789	13799	
	⋮	⋮	⋮	⋮	
13761:	CCG-----	AGGAGCGT	GCTCTGGGGA	ATAGAGTATG	CGCCTGTG
13742:	...	.....	.....	G.....	.....
13779:	...	.....	.....	G.....	.....
13759:	...	.....	.....	G.....	A
13525:	A.....	G.....	CTC.....	G.G.A...T	TG..C.
12653:	..TCCGCC	CAACCG..	A.T..A..	T.....	GCAG...TG..CA
11803:	..C-----	.....	C.G.....	G.G.-----	A..A
12379:	..C-----	.....	C.G.....	GTG.-----	A..A

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13802	13810	13820	13830	
	⋮	⋮	⋮	⋮	
13800:	T-----	GTA-----	TGTGTGGG	GAGGCGAAT	TGTTCCGAGGG
13781:	.....	G-----	.....	.....	.....
13818:	.....	.....	.....	.....	.....
13798:	.....	G-----	.....	.....	.....
13564:	.GTTGAGG	.G-----	G.G.....	C.CT.C.....	T.....
12703:	.....	C.TGAGT	GTTTAGG..	G.....	G...C.....
11834:	.....	A.....	G.G..T.T	T.GTG....	ATATC.A.
12410:	.....	A.....	G.G..T.T	T.GTC....	ATAT..A.

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13840	13850	13860	13866	13874	
	⋮	⋮	⋮	⋮	⋮	
13831:	CGTGGGGG	AGGGGTGCC	CGCCAGAT	CGGAAGGAC	----GGGCTC	--TCC
13812:	.....	.....	.....	.....	.....	.....
13849:	.....	.....	.....	.....	.....	.....
13829:	.....	.....	.....	.....	.....	.....
13602:	..A---T...	TG...TT...	A.....	.....	TT...	.....
12746:	..CA--...	TG...T...	G.C.....	----A.....	--..G	.....
11865:	..AG.-----	A.G.G...A	.....	TAACG.TA...	--C..	.....
12441:	..AG.-----	..TG.G...A	.....	TAATG.TA...	--C..	.....

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13884	13890	13894	13904	
	⋮	⋮	⋮	⋮	
13875:	CTCTCTCC	AGC-----	CCACC-CTC	-----GGGCCT	GGACT
13856:	.....	C.....	.....	.....	G..
13893:	.....	.....	.....	.....	.....
13873:	.....	C.....	.....	.....	G..
13645:	.C.C....	A.GCCCC	CCCCACCC	.....	C.TCCCA
12788:	.C..-G.GC	.....	.....	CT-----	C.....
11900:	AC.C.AT.C	.ATCTT-	.....	T..T-----	.....
12476:	AC.CAAA.C	.TATCTT-	.....	T..T-----	.....

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13914	13924	13933	13937	13947	
	⋮	⋮	⋮	⋮	⋮	
13905:	GGCCAGAG	CGTCAGCC	CTCG-CCG	GCGAGC-----	GCGGTGAGAGG	
13886:	.....	.....	CA.T...	-----	.....	
13923:	.....	.....	.....	.....	.....	
13903:	.....	.....	CA.T...	-----	.....	
13694:	A..G...A	.....	T.-T.GC	.....	.....	
12810:	.....	.....	C..T-----	.....	G.T	
11936:	C.....	A.....	TA.G.C..A	..C....	AAGCAA	
12512:	C..T.----	.....	TA...C..A	..C....	----AA	

human  
chimp  
baboon  
cow  
cat  
rabbit  
mouse  
rat

	13957	13967	13977	13987	13997	
13948:	CTGGACGAGGCGAAGCTCAGAGACGCCAAAAACCTGAAAGATGCTGTCAT					human
13929:	.....					chimp
13966:	.....					baboon
13946:	.....					cow
13737:	.....T.G...C..A.....A.....					cat
12836:	.....A.....					rabbit
11986:	.....AC..C..C..T.....					mouse
12554:	.....AC..TC.....T.....					rat

	14007	14017	14027	14037	14047	
13998:	CGCCACCCCTTCCCCCAGCTGGTCCCTGGCAGGTCCGGCCCCCTCCCAG					human
13979:	.....					chimp
14016:	.....					baboon
13996:	.....					cow
13787:	.....A.....C..C.....A.....					cat
12886:	.....-.....T..C.....T..A.....					rabbit
12036:	.....T.T..-...A.....					mouse
12604:	.....T.....-...G.....					rat

	14057	14067	14077	14087	14097	
14048:	GCTGACCCAGATACATCCCCGTTTGGGTCCGAAAGGGAGGGAGGGAAA					human
14029:	.....					chimp
14066:	.....					baboon
14046:	.....					cow
13837:	C.....T.....					cat
12935:	.....A.....-.....A.....					rabbit
12085:	.....T.....A.....					mouse
12653:	.....T.....A.....					rat

	14107	14117	14127	14137	14147	
14098:	CAAGCACCGCGCCACCACGACTCGGGAAGAGCAGGGCTCCTCGCCAGGG					human
14079:	.....G.....					chimp
14116:	.....					baboon
14096:	.....G.....					cow
13887:	.....TG.....					cat
12984:	.....A.....C..G.....					rabbit
12135:	.....G.....A.....					mouse
12703:	.....G.....A.....					rat

	14157	14167	14185	14195	
14148:	CCGCTCCGTATCGCTGGGCCGCGACCCA--GGGAAGTTCTGCTTGGTCTG				human
14129:	.....--.....				chimp
14166:	.....--.....				baboon
14146:	.....--.....				cow
13937:	.....A.....-G.....G.C.....				cat
13034:	.....G.A...T.....T.....GG.....G...C.....				rabbit
12185:	.T...A...A...TA.....-G.....C...T				mouse
12753:	.T...A...A...T.....-G.....C...T				rat

	14205	14211	14221	14231	14241		
	↓	↓	↓	↓	↓		
14196:	CGTCGGT	CGGGC----	GGGAGGT	GCAGGG	AGGGCGCGT	GGGGCGGCAGGC	human
14177:	.....	GGGA.....	.....	T..A..C.....	.....	.....	chimp
14214:	.....	-----	.....	.....	.....	.....	baboon
14194:	.....	T.GGGC.....	.....	T..A..C.....	.....	.....	cow
13986:	T.C.....	T.A-----	.....	G.TGA.....	-----	A.G..AG	cat
13084:	T.C-----	-----	.....	G.....	C.....	T..G.CG	rabbit
12234:	..CT..G..	-----	.....	-----	..T.A	CT....	mouse
12802:	..CT..G..	-----	.....	-----	..T.A	ACTG...	rat

	14251	14261	14279				
	↓	↓	↓				
14242:	AGCGGGG	CGGGGAG	CGTTTCTG	CTCGC--	CGTGTGTGCACGCCGGC----	human	
14227:	G.....	A.....	---	-----	-----	chimp	
14260:	.....	-----	-----	-----	-----	baboon	
14244:	G.....	A.....	---	-----	-----	cow	
14030:	G.T....	----	TT..A....	A..A..AG.....	CT.....	T..TGGT	cat
13109:	T...C..	-----	-----	A...C...	T...T..	-----	rabbit
12263:	TCT.A.AA..	A-----	-----	..C..G...	T.A.---	---	mouse
12831:	TCT.A.AA..	A-----	-----	.....	T..T.A.---	---	rat

	14295	14304	14314	14324			
	↓	↓	↓	↓			
14287:	-----	CATGGGGAG-	GGTATGAT	AGGCACCAAAG	GCAACACGC	human	
14272:	-----	.....	-.....	GG.....	T....T	chimp	
14305:	-----	.....	-.....	.....	.....	baboon	
14289:	-----	.....	-.....	GG.....	A..T	cow	
14076:	GGCGTG	TAAAG..	G..T...T	A.G.....	G..C....	G.AAT	cat
13132:	-----	G..A.G.-T	..G..CCGA..	G.TGC.C...	G...C.	---	rabbit
12286:	-----	.....	..CCG.GATC..	T..C..C...	TT.---	---	mouse
12854:	-----	A.....	..CCG.GATC..	T..C..C...	TT.---	---	rat

	14332	14342	14352	14362	14372		
	↓	↓	↓	↓	↓		
14325:	C--TCTCAT	GTA	CTTACATG	CTTATGCTC	ACAAACCTC	CTTCCCCGTGA	human
14310:	..--.....	C.C.....	G.C.....	.....	A...	...	chimp
14343:	..--.....	.....	.....	.....	.....	.....	baboon
14327:	..--.....	C.C.....	C.....	.....	A...	...	cow
14126:	AA-.....	T...C.CTT...	G.....	.....	T...TGGA...	...	cat
13168:	.GG.AC.GCCA.	C.CTG....	A.GC.C..CGT....	A..AAAG..	...	...	rabbit
12319:	---C...C..C..C	CA.--.....	G...C.G-.T....	GAAG..	...	...	mouse
12887:	---C...G..C..C	CA.--.....	G...C.G-T.T....	TGAAG..	...	...	rat

	14382	14392	14402	14412	14420		
	↓	↓	↓	↓	↓		
14373:	AGCAGGGGA	AATAAACG	AAAGCTTAC	CTCCACCCT	TCTTTGTCCC	GC--AT	human
14358:	.....	T.....	.....	---	G	---	chimp
14391:	.....	-----	-----	-----	-----	-----	baboon
14375:	.....	T.....	.....	---	G	---	cow
14175:	..T..AA....	G.T.C.AT...	T...T..A..A....	-----	TG	---	cat
13218:	.AT-----	G.T..GCT.C	.....	T..C.....	-----	-----	rabbit
12363:	.....	A...AG.G.T..	AT...T..T....	GCTGCC.C	ATT.TA.G	---	mouse
12931:	.....	AT...CG.G.T..	AT...T..T.G...	GC.A..C.A-----	G	---	rat

	14430	14440	14450	14456	14466	
14421:	TTTCTTGAAGTAAATCCAGACACTTAGGAAA	----	GAAAAGGTGGTTGGC			human
14406:	.....T.....G.....	----	.....			chimp
14439:	.....	----	.....			baboon
14423:	.....G.....	----	.....			cow
14220:	.C.....T.....G...C.TGTG.G.G.AA..AG....					cat
13250:	.G...CC.....---	CG...GTGATA...G..A..AC....				rabbit
12413:	...G.....	-----	-----			mouse
12975:	...G.....	-----	-----			rat

	14475	14485	14488	14498	14507	
14467:	TCC-GAGGAACCAGAAACATTG	-----	CCAAAATTTCACTTCTACC	-G		human
14452:	...-.....T.....	CCAAAAT	.....	-		chimp
14485:	...-.....	-----	.....	-		baboon
14469:	...-.....T.....	CCAAAAT	.....	-		cow
14270:	C..A.....T...--G...	-----	.C...-.....T...G.			cat
13297:	GTTGTT.....	--G...	-----	T...C..TG.		rabbit
12424:	---	-----	TG..G.....G.A.			mouse
12986:	---	-----	TG.GG.....G..G.T.			rat

	14517	14527	14545			
14508:	TGAATAAAGTAGGAGTGTGGATGTGTAT	--GTTGGGAAAGG	-----			human
14500:	.....	-----	-----			chimp
14526:	.....	-----	-----			baboon
14517:	.....	-----	-----			cow
14310:	CA.....CA...G.....G.....	-----	-----			cat
13338:	CC..G.....G.....	ACA	-----			rabbit
12446:	.A.C.G..ACCA.GCAC.A...C.AT.--T.A..G.....	-----	-----			mouse
13008:	.A...G..ACCA.GCAA.AC.C.C.-.-T.G...G.C..GGGATGGGG					rat

	14549	14558	14568	14578	14588	
14547:	-----TAGACA-GTTGTATGATTCTCTCATGGAGATTATGATTTGAAA					human
14539:	-----...G..-.....	A..C.....				chimp
14565:	-----	-----	-----			baboon
14556:	-----...G..-.....	A..C.....				cow
14349:	-----...G..-C.....C...G.....	CTA..A..CC....				cat
13379:	-----...G..-...GC..C...G...A.A.AAGA..A...G					rabbit
12485:	-----...G..AC.G.C..AAC.G...C.A.GAA.ACGTT..					mouse
13055:	GGGGTGT...G..G...C...C...---	T.G.GAA.A.GTT..				rat

	14598	14604	14612	14622	14632	
14589:	CCACCTAAAAAA	----CTCCA	ACT--CAAGTTCCACCCATCTCAGCACAT			human
14581:	.....-.....	-----	-----			chimp
14607:	.....	-----	-----			baboon
14598:	.....	-----	-----			cow
14391:	.T...C.....GCTC..A.T..C-	.....C.....C.				cat
13421:	...T...GG..----	TC..C-A.....				rabbit
12528:	...T.TTG...----	G..CA.....C.....G.TC.....G.				mouse
13102:	...T.TTG...----	G..CA.....C.....				rat



	14642	14651	14661	14670	14680	
	⋮	⋮	⋮	⋮	⋮	
14633:	CGTGTCCCTCACAGCT-	AAGGGGTGTTAGAAGTACA-	TGGAATGTGACCAT			human
14624:	.....-	.....-	.....-	.....-	.....-	chimp
14651:	.....-	.....-	.....-	.....-	.....-	baboon
14641:	.....-	.....-	.....-	.....-	.....-	cow
14440:	.C...G...T.....-	A.....A.....-A...G...G....				cat
13466:	.....-	C.....A.....-C.C.G.....C.				rabbit
12574:	.C.....C.....C.....	AC...-A...G.....				mouse
13148:	.....T.....C.G...C.....	AC...-A...G...G....				rat
587:			.....T.A..A..GAA.....			fugu

	14690	14700	14710	14720	14730	
	⋮	⋮	⋮	⋮	⋮	
14681:	CAGCTTACAGGCCCTTGCTCTCCGCCAGGGAATTAGTGAGTGGCCAGGA					human
14672:	.....T..C.....G.....					chimp
14699:	.....					baboon
14689:	.....T..C.....G.....					cow
14488:	...T...G.....C.....A.....T.....					cat
13514:	T...C..G.A....GCT--C.....C.....T.....					rabbit
12623:	-..T...GGAT....C.....T---A.....					mouse
13197:	..-T...AGAT....C.....T---A.....					rat
609:	.....C...C.T....A..G.GA..T....					fugu

	14740	14750	14760	14770	14780	
	⋮	⋮	⋮	⋮	⋮	
14731:	GACCTGCCCTTCAGTTGATGGTGAGGCCAATGGAATGACCTAAACCTGAA					human
14722:	.....					chimp
14749:	.....					baboon
14739:	.....					cow
14538:	C.T.....T.....T.....					cat
13562:	.....C...T..G...G.....					rabbit
12669:	.....C..G.....					mouse
13243:	...T.....C.....					rat

	14790	14800	14810	14820	14830	
	⋮	⋮	⋮	⋮	⋮	
14781:	ACAGACCTCCTGGAAAAGAAATGGACCATCCCCAAAAGCTAATTAAATCC					human
14772:	.....G.....A.....C....					chimp
14799:	.....G.....					baboon
14789:	.....G.....A.....					cow
14588:	.....AG..C.....-..A.....					cat
13612:	.....GC.A.....T..-					rabbit
12719:	...G.....A.....GG.....T.TT-.G...C.....					mouse
13293:	...G.....A.....GG.....TT-.G...C.....					rat

	14840	14850	14860	14870	14880	
	⋮	⋮	⋮	⋮	⋮	
14831:	ACGCCAGAGGACTTCATCCTGGGGCAGGAGGAGGAGTGCCACATGTC					human
14822:	.....C.....					chimp
14849:	.....					baboon
14839:	..C.....C.....					cow
14637:	..TTG.A.....-----A...A.....A.					cat
13661:	C.T...A.....C..G.....---.TTC.T..T....--					rabbit
12768:	T.C...A..AG....C-----AG.A..C.....C.					mouse
13342:	T.C..GA..AG....C-----AG.A..C.....C.					rat

	14890	14900	14910	14920	14930	
14881:	TCACAGAGAAGAAATTGGTTTTGGT	GAAAGGCAAAAGGCTGAAAATGTT				human
14872:	..G.....				..G.....	chimp
14899:	.....T.....					baboon
14889:	..G.....				..G.....	cow
14681:	.TG.....G...CA.CC...GT...A.GC...A.....				.....	cat
13706:	---...G.....A.....				-----...G..AA..	rabbit
12803:	.TG.T...T.C.G..CA.....C.....				..A...A....	mouse
13377:	.TG.C...T.C.G..CA.....C.....				..AC...A....	rat

	14940	14950	14960	14970	14980	
14931:	GAGTGAAGCTAAATCCAGATGTGAAAAAGGGTCCACCCAAACACCCCTT					human
14922:	.....A.....					chimp
14949:	A.....					baboon
14939:	.....A.....					cow
14730:	A..A.G.....				..AA.....	cat
13746:	A..AA....GC.....C.....G.-A....G.....C..G..G					rabbit
12853:	A..AA.G....C.....C.....-A..C.....					mouse
13427:	A..AA.G....C.....C.....-A..C.....					rat

	14990	15000	15010	15020	15030	
14981:	CCTGACCTGTCTAGAGGCCGTCTGGACTCAATGACTTGTCTCTTCCAGAT					human
14972:	.....					chimp
14999:	.....					baboon
14989:	.....					cow
14780:	.....G....A.....CAG.....					cat
13795:	.....G....A.GGC..C.AGG.....					rabbit
12902:	-.....G....A.....CAG.....G.....					mouse
13476:	-.....G....A.....CAG.....G.....					rat

	15040	15050	15060	15069	15079	
15031:	CTGTGATTCCATTTCCCTCCATTCTCCACCCCT-TTCACTTATGAACCA					human
15022:	.....G.....					chimp
15049:	.....					baboon
15039:	.....G.....					cow
14830:	.....AT.....T.A-.....A.....C...					cat
13845:	.....GGC.C.A.....CG.....G....CG.GC.C...					rabbit
12951:	.....C..T...A...-A.....AGC...G...C...					mouse
13525:	.....T.C...T.....-A.....GGAG....G...C...					rat

	15089	15099	15109	15119	15125	
15080:	TTACTTAGCCCCAGTATAAATTATTTTCCGCAAGAAGGC-----CTTTA					human
15071:	.....T...C.....C..G..G.....				-----	chimp
15098:	.....				-----	baboon
15088:	.....T...C.....C..G..G.....				-----	cow
14879:	...-.....T--..GC...CT.CGC...AT..C...TCTGA...C					cat
13895:	C.C....T...--..GCG...CCC.C...T---.C...G----.C.GG					rabbit
13000:	...A...T...-.C.G.A.C.C...CA.TG...G.CT----.CCGC					mouse
13574:	...A...T...-.C.G.AAC.C...AT.C...G.CT----.CCGC					rat

	15135	15145	15155	15165	15175	
15126:	CTCCCTCCTTGTCTGTACCTATTCTCTCGATGGACCCCTTCGCTTTGAAG					human
15117:	...A.....GT.....A.....G...A.....					chimp
15144:	.....					baboon
15134:	...A.....GT.....A.....G...A.....					cow
14926:	...AG...CA.....G.C..TCA.....-.....A.....					cat
13936:	...T...CA-GG..TT.....T.G...A..-G....C....C.-					rabbit
13045:	..GGGT..CT.AA.C.T...G..G..TA.AT.C-----					mouse
13619:	...T.AG..CACA..C.T...G.....TA.AT.G-----					rat

	15185	15194	15204	15214	
15176:	ATAAGATGTTT-GCTAGTAGACATGGTTAGGAAATGCTCAA-----				human
15167:	.....G.....-A.....A.....				chimp
15194:	.....-.....				baboon
15184:	...AG...-A.....A.....				cow
14975:	.C.GTG...AA..C...GGAA..G.....				cat
13983:	-----AC..G..G..A..GA..CT.....ATACAAAGA				rabbit
13079:	-----C..T.G.C.GG.A..G.A....T..C-----				mouse
13653:	-----C..T.G.C.GG.A..G.A....T....				rat

	15216	15226	15236	15246	15256	
15216:	-----GAAAATTAGGAGGAAAGAAGGTTACAGCAAACCTTACTTCT					human
15207:	-----.....A.					chimp
15234:	-----.....					baboon
15224:	-----.....A.					cow
15016:	-----G..A.....C..A...TT...TT..C.T....					cat
14021:	CAAACAAACA.....CC.....A..G.....G...C.-					rabbit
13108:	-----GC..GC.....-.....G.G.....					mouse
13682:	-----GC..GC...CA.....-.....G.G.....					rat

	15266	15275	15285	15295	15301	
15257:	TTTACAATCAAA-ACCACCATCCTAAAGAAGAGTTAATAAATAA----TG					human
15248:	.....-...T.....					chimp
15275:	.....-.....					baboon
15265:	.....T...-...T.....					cow
15057:	C..G...A...-...T...C.....					cat
14070:	C..G...A...-...TG...T.....TG...GC.G.....					rabbit
13137:	...GTC...GCT.TG...AGC...C...G.C...ATGGCA					mouse
13711:	...CTC...G.A.TG...CAGC.....G.ACAGC.					rat

	15310	15320	15330	15340	15350	
15302:	AAGTA-AATTGCATATGACTTCAGCCTAGCTATAGCAGATGATGAGGTAA					human
15293:	.....-...C.....C.....					chimp
15320:	.....-.....					baboon
15310:	.....-.....C.....					cow
15102:	.....-.....T.T----					cat
14115:	...G-G...A.....A.....T.....					rabbit
13187:	GG...-CT..T...---G...CT.CGCT..C.....G.G...G..					mouse
13761:	GG.C.CGCG.T..C.---.....CT.CG.T.....G..					rat

	15360	15369	15379	15389	15399	
15351:	GGAAAGAAAGGG-	TCAGAGTGTCTTT	TAGATTTATTAATTT	TAAACATCTGA		human
15342:	.....-	C.....	.....	.....	.....	chimp
15369:	.....-	.....	.....	-----	.....	baboon
15359:	.....-	C.....	.....	.....	.....	cow
15147:	A.....GC.....T.....	C.AC.CC.C.....	-----	G.TG.....	.....	cat
14164:	.....CT.....T.....	C.C.....TG.C..--	.....T.....	.....	.....	rabbit
13233:	.A.....GC..AT-	.....-.....	TG.C...C...C-	TG.T...	.....	mouse
13802:	.A.....GCC..AT.....	G.-.....	C..C..CC.....	C-..TG.T...	.....	rat

	15408	15418	15428	15438	15448	
15400:	TTTTTG-ATTTCTTCAATGAGAAATCTCAGAATTGACTGTAAAATTCATT					human
15391:	.....-	.....	.....	.....	.....	chimp
15413:	.....-	.....	.....	.....	.....	baboon
15408:	.....-	.....	.....	.....	.....	cow
15191:	.....-T...A.....	.....	T.....	.....	.....	cat
14212:	...AAAA.AAAA.....	CA.....	--.....	G.....	.....	rabbit
13280:	G...C.T.....T...A.....	T.....	CA.....	T.-C	.....	mouse
13850:	G.C.CAT.....	A.....	T.....	CA.....	T.-C	rat

	15458	15468	15480	15485		
15449:	TACAGTATACAGAACCCAATTCTCTTT-----CTGGA-----GCTTA				human	
15440:	.....	G.....	-----	-----	.....	chimp
15462:	.....	.....	-----	-----	.....	baboon
15457:	.....	G.....	-----	-----	.....	cow
15238:	.....AG.....	-----	-----	A...	.....	cat
14260:	.....C.....	-----	T.A.....	A...	.....	rabbit
13329:	...A.....T...CCC.C.CCC-----	ACT.AA.-AAAT.A...	.....	.....	.....	mouse
13899:	...A.....G....GCCGC.CCCACCCCAACT.AA.AAAAA.A...	.....	.....	.....	.....	rat

	15495	15505	15515	15525	15535	
15486:	ATGTTAGTTTGCTTTTAACTTCAGTATAGCACTGTAGCCAAATGAGTCAG					human
15477:	.....A.....T.....	.....	.....	.....	.....	chimp
15499:	.....	.....	.....	.....	.....	baboon
15494:	.....A.....T.....	.....	.....	.....	.....	cow
15275:	.....A.....A.....T.....	.....	.....	.....	.....	cat
14297:	...GA.....G.....	CT.A.....	.....	.....	.....	rabbit
13372:	.....A.....G...TCT.....	.....	.....	.....	.....	mouse
13949:	.....A.....G...T.T.....	.....	.....	.....	.....	rat

	15545	15555	15565	15575		
15536:	TCTATTTTCTTAGTTAGATCCATTGTTTGTCTAATCTCCCAGGGCAGTG-				human	
15527:	.....-	.....	.....	.....	.....	chimp
15549:	.....-	.....	.....	.....	.....	baboon
15544:	.....-	.....	.....	.....	.....	cow
15325:	.....C.....	.....	.....	A.-	.....	cat
14347:	.....	.....	.....	A.A	.....	rabbit
13422:	.....	.....	.....	A.-	.....	mouse
13999:	.....	.....	.....	A.-	.....	rat

	15591	15601	15611	15621	15631		
15585:	---TAAGAGA	AACTCATT	TACAACTG	AGCCATCT	CCACCCTT	AAAAATGG	human
15576:	---	.....T	.....	.....	.....	.....	chimp
15598:	---	.....	.....	.....	.....	.....	baboon
15593:	---	.....T	.....	.....	.....	.....	cow
15374:	-----	.....A	.....T	CA.A	.....C	.....	cat
14397:	AAGAG	.....A	G...T	CA.AG	.....G	.....	rabbit
13471:	-----	.....A	.....T	CAGA.T	.....	.....	mouse
14048:	-----	.....A	.....T	CAGA.T	.....	.....	rat

	15641	15650	15660	15670	15680		
15632:	AGAGTTACTTC	-TCAACCA	AATAGTCA	TTTGTCTT	CCAGTCTG	AACTGAC	human
15623:	.....	-.....	.....G	.....G	.....G	.....	chimp
15645:	.....	-.....	.....	.....	.....	.....	baboon
15640:	.....	-.....	.....T	.....G	.....G	.....	cow
15419:	.....	T.....	.....	G.T	.....G	.....	cat
14447:	.....G	G.---	.....CA	.....T	.....G	.....	rabbit
13516:	-A.....	T.....	T.C.G	.....T	.....GT	AGT	mouse
14093:	-A.....	T.....	T.C.G	.....T	.....GT	AGT	rat

	15690	15700	15710	15720	15730		
15681:	TTCTTCCTC	AGGCAATG	ACTCCTA	AGATAGCC	ACTCACTA	ACCAAAGGAT	human
15672:	..T..T	.....A	.....	.....	.....	.....	chimp
15694:	.....	.....	.....	.....	.....	.....A	baboon
15689:	..T..T	.....A	.....	.....	.....	.....	cow
15469:	.....A	.....G	.....TT	.....T	.....	.....A.A	cat
14494:	.....A	.....G	TGC.CT	..T	.....G	.....A.GG	rabbit
13565:	.....T	G.....	G.....	-..A..T	..A.T.T	TT.....AT	mouse
14142:	.....T	T.....	.....	.....	.....	.....	rat

	15749	15759	15769	15779			
15731:	AAGTTATAG	-TATCAAT	CGTTTAA	ATCTCAGT	GTGCCTTT	AAATTAATGT	human
15722:	...G...	-.....A	.....	.....	.....	.....A	chimp
15744:	.....	-.....	.....	.....	.....	.....	baboon
15739:	...G...	-.....A	.....	.....	.....	.....A	cow
15519:	.....A	AC.....	G.GA	.....A	TA.....	-----	cat
14544:	.....C	A-.....	G.A.G	.....C	T.....	A.....G	rabbit
13612:	T.T..T	..T-.....	.....	.....	.....	.....	mouse

	15789	15799	15809				
15780:	GCACCGAAG	TTTTTTG	CTTCCAG	CCATGAGA	-----	human	
15771:	.T..A	...C	.....	-----	-----	chimp	
15793:	...A..A	.....	.....	-----	-----	baboon	
15788:	.T..A	.A.C	.....A	-----	-----	cow	
15565:	...A..AC	-.....T	-...G	-----	-----	cat	
14593:	.T..A	.AC.A	.....T	.....T	.....CAGGAG	AGGTAGTTGAGAA	rabbit

	15812	15822	15832				
15811:	-----	GAGTAGCA	AGTACCT	GAGTAGCTCT	-----	human	
15802:	-----	.....A	.....	-----	-----	chimp	
15824:	-----	.....	.....	-----	-----	baboon	
15819:	-----	.....A	.....	-----	-----	cow	
15593:	-----	.....	.....	-----	-----	cat	
14643:	ATGCTCAA	..AA.AT	.G.....	ACTCTC	..GGTGGG	TGGGGGAGGA	rabbit

LINE1  
→

15845

15836: -----CCTTTTCAGG human  
 15827: -----C..... chimp  
 15849: ----- baboon  
 15844: -----C..... cow  
 15593: ----- cat  
 14693: GTATCAAACCATAAAACTTGGCCAAATAATGTGAGGTGTAT.....C rabbit

LINE1  
→

15855      15865      15875      15885      15895

15846: TATTGGACAGTAGGCCCCACACGGCTGTGATCCTTGAGAGAAGGAAAACA human  
 15837: .....G..... chimp  
 15859: ..... baboon  
 15854: .....G..... cow  
 15593: ----- cat  
 14743: C...A.G.....AG...CTA.....C.....C.....G-..... rabbit

LINE1  
→

15905      15915      15925      15935      15945

15896: CATTAGTTTTGCTCCACAACATCTTACAATTGTCCAGGTTTTTCTGCTG human  
 15887: T...GAG.....C.GT..... chimp  
 15909: ..... baboon  
 15904: T...GAG.....T.....C.GT..... cow  
 15593: -----T...TG.....CC.T.....T.....A..CA cat  
 14792: .....G.G.....T..G.G.T.C.....TAA.G.....CA rabbit

LINE1  
→

15955      15965      15975      15985      15995

15946: AAGAGAAAAACATTTTTCTAGAATGTAGGAAGGTAGAATACAGGCAAGGC human  
 15937: .....G.....C.....T..... chimp  
 15959: ..... baboon  
 15954: .....G.....C.....T..... cow  
 15634: ..AG.C.--CTT.....GAGG..C.A..A.CG...CC..T----- cat  
 14842: .....C.----TC.....G.GG.AC.A.....-T.G..A...GAA. rabbit

LINE1  
→

16005      16015      16025      16035      16045

15996: AGTAGTTTTCAGTTAAGGAGGAGAGACTGGAGTTTTGGGCTGTTGAAGCA human  
 15987: ..A.....G.....T..... chimp  
 16009: .....A..... baboon  
 16004: ..A.....G.....TT..... cow  
 15675: ----.C.T..-----A.T.A.....A.T..... cat  
 14887: G..G..C.....G...TGT..TA.T.--A.....G..... rabbit

16061      16071      16081

16046: GCTGAAATT-----TCTGAAGATAAGTAGCTGTGGAACAGG human  
 16037: .....G...T.A...A... chimp  
 16059: ----- baboon  
 16054: .....G...T.A...A... cow  
 15713: .....GGTGGGGTAGCATA...T.AG..G.....A..A... cat  
 14935: ....G....-----GACAGTATT...G...T..C...A..A..AG.. rabbit

	16091	16101	16111	16120	16130	
	⋮	⋮	⋮	⋮	⋮	
16082:	GACTCCCCCGCAAGTCTACATGGAGATT	CACCACCAGT	-CTGGGCCAACA			human
16073:	.....A.....		C..T.....			chimp
16095:	.....		-.....			baboon
16090:	.....A.....		C..T.....			cow
15763:	..-G...TAA.....	A...C.....	TGG..C..T...T..A.			cat
14980:	.G--.A..TAG.....	C..G.....	C...TCT...C..T.....	G.		rabbit

	16140	16150	16160	16170	16180	
	⋮	⋮	⋮	⋮	⋮	
16131:	GCTAAGCTGAATATAGACATGACAAAAC	TCTGCAGGGCCTAACAGAGATT				human
16123:	...G.....	A.....	C.....			chimp
16144:	.....					baboon
16140:	...G.....	A.....	C.....			cow
15811:	...G.....	ATT..G.T.....	TA....GT.....			cat
15028:	A..G.....	TCC.----G..G..G.T...T..A-	.....G-----.			rabbit

	16190	16200	16210	16220	16230	
	⋮	⋮	⋮	⋮	⋮	
16181:	ACCTGCTGCATGTAGTGCATTATTGAGAGACATTGGAGTTCCATCACAGC					human
16173:	.....A...G.....		G....			chimp
16194:	.....A.....					baboon
16190:	.....G.....	G.....	G....			cow
15861:	G...A.....	A.CACA..G.G.....	CA.....T..T			cat
15067:	G.-----A.....	CAG.T...G.A.....	T..C...-----A.			rabbit

	16240	16250	16260	16270	16280	
	⋮	⋮	⋮	⋮	⋮	
16231:	AGGGCAGAGACCTCACTGAGCATGTCAGGGATTCAATTGAGATGCTGG					human
16223:	.....C.....	T.....	CT.....			chimp
16244:	.....					baboon
16240:	.....C.....	T.....	CT.....		A.	cow
15911:	G...TG.....	-..A...T.A...T.T...CC.....	C..T...T..A.			cat
15101:	.....-----	TA.....AT.TG..CTC...C.C.....	C			rabbit

	16290	16300	16310	16322	
	⋮	⋮	⋮	⋮	
16281:	AAAGGCCTTGCCCTTAAAAGCAATAGTCAGGCTA-----	AAAAGCATG			human
16273:	.....C.A.....	G.-----	T.....		chimp
16294:	.....		-----		baboon
16290:	.....C.A.....	G.-----			cow
15960:	...AT.A.CT...T..T.T..GC.G..CA.CT-----	TTGT.T.GA			cat
15144:	C.....A.....	G...T...-...TA..TCTGTGCAC.....	T..		rabbit

	16332	16342	16352	16362	16372	
	⋮	⋮	⋮	⋮	⋮	
16323:	TCTTAGAGCAAAAATCAAAAATGTTGTTTCTCCATAGCACATACTGTAACA					human
16315:	.....T.....	C.....	A.....		G	chimp
16336:	.....					baboon
16332:	.....T.....	C.....	A.....		G	cow
16002:	.T.AG.TCA..G.T.....	CT.....C..CCT.....	CA....			cat
15193:	.....T.....	T.....	C-----			rabbit

LINE1  
→

	16382	16392	16402	16412	
	⋮	⋮	⋮	⋮	
16373:	AAGAATGGTAAGAAATCAGACAGGACCAGGAAATTTATAAGAATGAAA-				human
16365:	.....AA..T.....		G.....		chimp
16386:	.....A.....				baboon
16382:	.....AA..T.....				cow
16052:	...CAA----..CA...T...C.A.A.....	C.....A...C			cat
15214:	.G.G..TAA..T..GG.....	-.....TG.....	C..A.CCA...T		rabbit

LINE1

16431 16441 16451  
 16422: CAACACCCATTAATAAAAAAAAAACAACATGATACAGATTCT----- human  
 16414: .....-...G.....C..C----- chimp  
 16435: .....T.....C.....C----- baboon  
 16431: .....-...G.....C..C----- cow  
 16098: .....T...-...GG..G.....A..C..ACAC.CATTAAAGGAAG cat  
 15263: A...C.....C-...GG..G.T..T.....- rabbit

LINE1

16469 16479 16484 16494  
 16461: -CTACAATGGATAATTAACAAT-----AAAAAATTTAATA human  
 16452: .....C----- chimp  
 16474: .....C----- baboon  
 16469: .....C----- cow  
 16147: A.C.T.T..T.G...T...GTTGTGCATACAATA....AA..GG. cat  
 15294: -GG...G..T..C..C..T...-----C. rabbit

LINE1 SINE

16510 16520 16532  
 16495: GGCTGGA----CACGATGGTGCACGTCTATAGTCC-----CAGCCAC human  
 16486: .....T.....T.----- chimp  
 16505: .....----- baboon  
 16503: .....----- cow  
 16197: AAG..A.AAAC..A..AAA..TG-ACT...C..AAGAAAAAGA..T..A cat

SINE

16542 16548 16558  
 16533: TTGGGAAGCTAAC-----AAAGGAGGATCGCTTGAG----- human  
 16524: .....G.....G.....A..... chimp  
 16543: .....----- baboon  
 16541: .....G.....G.....A..... cow  
 16246: --AA...A..G..TCTGAGATGACCCAG.T.T...AT.GG..G.AAAAA cat

SINE

16569 16579 16588 16598 16608  
 16564: ----TCCAGGAGTTCAAAACCA-GCCCAGGAAACATAGCAAGACTCTGT human  
 16555: ----C.....C..... chimp  
 16574: ----C.....T..... baboon  
 16572: ----C.....T..... cow  
 16294: ATGT.TT.AT..C.T.T.GTT.T.TT..A.C.TTT.A..G..A..ATGA. cat

SINE LINE1

16616 16626 16636 16646 16656  
 16609: TTC--TAAACAAACCAACCAACAAACCAACAAACAAATATGGACAAGTG human  
 16600: .....A..... chimp  
 16619: .....A..... baboon  
 16617: .....A..... cow  
 16344: .A.AA.G..T...TAG.TGG.T..TTT..GT.G.T...GAAAG.C.-.C cat



LINE1

16666 16676 16685 16695 16702  
 16657: AAAAACACACAAAAGTGTATCTAT-ACTTAAGAGAAAGCAGTC---AATAG human  
 16648: .....C.....G..... baboon  
 16667: .....-..... baboon  
 16665: .....C.....G..... cow  
 16393: .....A.TG...---.....GA..CA..A..T.TAAT...TGA...GA cat

LINE1

16712 16722 16732 16741 16751  
 16703: AAACCTGATCCTGAGATGGCCAGATATAGGA-GGAATTGGCAGGAAAGAA human  
 16694: .....C..... baboon  
 16713: .....-..... baboon  
 16711: .....C..... cow  
 16440: ...A.T-CA...ATG...AT.ACA.....T...G.....G.A.G cat

LINE1

16761 16771 16781 16791 16801  
 16752: ATTTTTAAAGTAACTATTATAAAATATGTTTCAGGTATTTAAAGGAAAATAG human  
 16743: -----T.....-.. chimp  
 16762: ..... baboon  
 16760: -----T.....-.. cow  
 16489: -----GG..G....CG.-----A...G.... cat

LINE1

16811 16821 16831 16841 16851  
 16802: AATGAACAAGTGGACAATGAACAAATAGAGAATCTCAGCAGAAAAATGGA human  
 16786: .....A.....A...T..... chimp  
 16812: ..... baboon  
 16803: .....A.....A...T...G..... cow  
 16511: ..CTT.TCT.A...-----T.G.....-----AG.T.C.... cat

LINE1

16861 16871 16881 16891 16899  
 16852: AGCCAAAAGAAAGAAATGAAAATTCAAAACCCCGTTAGTACA--GTTATC human  
 16836: .....T.....A.....T.--A..... chimp  
 16862: ..... baboon  
 16853: .....T.....A.....T.--A..... cow  
 16546: ..TT-----T...C...T---T.TG...C...ATA.C..G cat

LINE1

16909 16919 16929 16939 16949  
 16900: TAATCTGCAAAATTTGTACTTTCTGAAATGGAATTCAGAAAGAAAGCAG human  
 16884: ....T..... chimp  
 16910: ..... baboon  
 16901: ....T..... cow  
 16588: ..G...--T.A...G-----GG...G....A.....A... cat

LINE1

16950: AAAGAAAATGGGGC--AAAAAATATTT---TGGAA--ATAATGCCCCAAA human  
 16934: .....AA.....A.A..... baboon  
 16960: ..... baboon  
 16951: .....A.....AA.....A..... cow  
 16630: .G..G....T.AAATT.C.T.C..G.ACA..A..AG.C.C..AAT..G. cat

LINE1

16993: TTTGGCCCAGATGATGGAAAACATAAATTTACCAATCTAAGAAAGGTGGA human  
 16979: .....G..G..... chimp  
 17003: ..... baboon  
 16996: .....G..G..... cow  
 16680: ....T..A.T.G...A...C...-----...GG.CCA.. cat

LINE1

17043: AAATCCCCAAAAGAATAATTACTCAGCATATCACACTGGCACAC----- human  
 17029: .....A..A..... chimp  
 17053: ..... baboon  
 17046: .....C.....A..A..... cow  
 16714: ...C...A.GC.....A...GA.....CTAT.T..ATTATG cat

LINE1

17087: ATCAAACATTTTAAAGCCATGGATG----AAAAATCTCTAAAGCAGCCAA human  
 17073: .C.....A...A..... chimp  
 17097: ..... baboon  
 17090: .C.....A...A..... cow  
 16764: .....G.....A...AAT...GGGA..... cat

LINE1

17133: AGGAAAAAGATACATTTAAATGTAGGAGAACAAGAATATGAATTACACCTG human  
 17119: .....T.....A..... chimp  
 17143: .....A..... baboon  
 17136: .....T.....A..... cow  
 16814: ...C..T.....ACTA.T.G.....C.....G..A cat

LINE1

17183: GCTTCTTATCAGCAACAATGGAAGTCAGAAGACAATGGAATGACA---TC human  
 17169: ...T.A.....T..... chimp  
 17193: ..... baboon  
 17186: ...T.A.....T..... cow  
 16864: A...T.C..T...G.T...T.G.....G..T...AAAGCCC...AGT.T cat

LINE1

17239 17249 17257 17267 17277  
 17230: TATAACACGCCTAAAAGAAAAAAA--AAGTCCACATAGAAAATCTATAATCA human  
 17216: .....T.....--CA.....C..... chimp  
 17240: .....-A..... baboon  
 17233: .....T.....---A..... cow  
 16914: .TA..A.T...T.....G..TCT.....C...T.....A.. cat

LINE1

17286 17296 17305 17315 17325  
 17278: GTG-AAAATACTCTCTGAAAATG-AAGTGGAACTCTTCTCTTGCTTCTTA human  
 17264: ...-.....C.....-.....T.....G...C chimp  
 17289: ...-.....C.....-..... baboon  
 17280: .G.-.....C.....-.....T.....C cow  
 16964: ...A.....TC..TCA...T..A...A...G..G....-...T.....C cat

17335 17345 17355 17365 17375  
 17326: TTCTTCACCTAACCTTAGGAATAAGAACCACATTGCATGAATAAGAGCAA human  
 17312: .....C..... chimp  
 17337: ..... baboon  
 17328: ..... cow  
 17013: .....C.C.T....G.....G.TT...C.C.....G.... cat

17385 17395 17405 17415 17425  
 17376: AATGAAAACAGAGCAACCTGAATAAAGTCTAAAGCCAACCCTAGACAGGA human  
 17362: .....A..G.....G..... chimp  
 17387: ..... baboon  
 17378: .....A..G.....G..... cow  
 17063: ..CTG.C.....GG.ACC.....A.....T.. cat

17435 17445 17455 17464 17474  
 17426: TCACGATTTCCAGTGGTACTTTTTTTTTGCTATCC-AAAAGAAAACCTCCA human  
 17412: ...A.....T.....-.....-.....A..... chimp  
 17437: ...A.....-.....-..... baboon  
 17428: ...A.....T.....-.....A.....A..... cow

Alu

17482 17490  
 17475: CC-----TTTTTTTTT-----GTTAG human  
 17460: ..ATCCATGTTTTG.....-.....TTAA.AC.. chimp  
 17486: ..-..... baboon  
 17477: ..CTCCATGTTTTT.....TTTTTTTTTTTTTTTTTTTTTAA.AC.. cow

Alu

17500 17510 17520 17530 17540  
 17491: AGTCTCACTCTGTTGCCAGGCTGGAGTGCAGTGGCATGATCTCAGCTCA human  
 17492: .....TG.....T.....A..... chimp  
 17502: ..... baboon  
 17527: .....TG.....T..... cow

Alu

17550 17560 17570 17580 17590  
 17541: CTACAACCTCTGCCTCCTTGGTTCAAGCAATTCTCTCTGCCTCAGCCTCC human  
 17542: ..G.....C.....C.....T... chimp  
 17552: ..G.....C.....C.....T... baboon  
 17577: ..G.....C.....C.....T... cow

Alu

17600 17610 17620 17630 17640  
 17591: TGAGTAGCTGGGATGACAGGTGCCACCACCACGCCTGGCTAATTTTTTGT human  
 17592: C.....T.....A..... chimp  
 17602: ..... baboon  
 17627: C.....T.....A..... cow

Alu

17650 17660 17670 17680 17690  
 17641: ATTTTTTAGTAGAGACGTGGTTTCGCCATGTTGGCCAGTCTGGTCTTCAA human  
 17642: .G.....A.....T.A.....G.....T chimp  
 17652: ..... baboon  
 17677: .G.....A.....T.A.....G.....T cow

Alu

17700 17710 17720 17730  
 17691: CTCCTGACCTCAGGTGATCTGCCACCTTGGCCTCCCAAAG----- human  
 17692: ..G..... baboon  
 17702: ..... cow  
 17727: ..... cat  
 17298: ....AC...CTGAG....CA..TGC...T..AACCAATTCT

Alu

17741 17751 17761 17771 17781  
 17732: TGGTGGGATTAACGGCGTGAGCCACCACACCTGGCCAACCTCCACCCTCCT human  
 17733: .....CA...AG.....T..... chimp  
 17743: .....A..T..... baboon  
 17768: .....CA..A.....T..... cow  
 17340: ..ACA...C..A.---...T..TA.-----AA....A..T...C cat

17791 17801 17811 17821 17831  
 17782: TAAAGGAACATAATATCATTCAGGATCTCCACAAATTTTCAGCAAATTA human  
 17783: .....G..... chimp  
 17793: ..... baboon  
 17818: .....G..... cow  
 17381: .G..A.....G.....G...T.T.C.....T.----- cat  
 13599: .....C.A.AA.G...T. mouse

17841 17851 17857 17867 17876  
 17832: AAATTATTTTTTAAAACCTCCAAAC----AAAACAAAACCTAGG-AAAAAA human  
 17833: .....C..... baboon  
 17843: .....A..... cow  
 17868: .....C..... mouse  
 17424: ----C..CA.A.CC.G.AT...CTAA...TTG...C..C--.GC. cat  
 13614: TTT.....A...T...T---.....AA.AC-....C. mouse

17886 17896 17906 17916 17926  
 17877: AAACGACAGAAAATAGAAAATGGACCCACAGGTAATTTAGAGTTCTGACTT human  
 17876: ...AA.....C..... chimp  
 17889: ...A.....A..... baboon  
 17912: ...A.....C..... cow  
 17468: ..T.A.....C-----A.....A..T... cat  
 13656: ...A.A.C...C...TT.T... mouse

Alu →

17936 17946 17956 17966 17976  
 17927: ATCTGAGAGGGACTCCAAAATAATTAATAATGTCTTTTTTTTTGGCCAGG human  
 17926: ..... chimp  
 17939: ..... baboon  
 17962: ..... cow

Alu →

17986 17996 18006 18016 18026  
 17977: CGTGGTGGCTCACACCTGTAATCCCAGCAC'TTTGGCAGGCCGAGGCGGGT human  
 17989: T..T.....G....T...T... baboon

Alu →

18036 18046 18056 18066 18076  
 18027: GGATCACGAGGCCAGGAGATCGAGACCATGGTCAAACCCGCTCTCTACTA human  
 18039: .....T.....A..... baboon

Alu →

18086 18096 18106 18116 18126  
 18077: AAAATACAAAAAATTAGCCGGGCACAGTGGTGGGTGCCTGTAGTCCCAGC human  
 18089: .....C..... baboon

Alu →

18136 18146 18156 18166 18176  
 18127: TACTTGGGGGGCTGAGGCAGGAGAATGGCATGAACCCAGGAGGTGGAGCT human  
 18139: .....G.....CA..... baboon

Alu →

18186 18196 18206 18216 18226  
 18177: TGCAGTGAGCCCATATCACGCCACTGCACTCCAGCCTGGGTGACAGAACG human  
 18189: .....A..... baboon

Alu →

18236 18246 18256 18266 18276  
 18227: AGACTCCGTCTCAAAAAAAAAAAAAAAAAAAGTTTTGTTTTTTTTTTTT human  
 17958: .T..... chimp  
 18239: .....GT-...TG.....G... baboon  
 17994: .T..... cow  
 17536: ..... cat

18286 18295 18305 18315 18325  
 18277: TTAAGAAGAACAG-ACAATTTTAAGACAGAGTTGGAATCCAGGCAGAAGACT human  
 17979: ---.....-.....G.....A.....A... chimp  
 18288: .....-..... baboon  
 18015: -A.....-.....G.....A..... cow  
 17537: .C...C..T.AC.T.....C.G...C...A..CT..TAT....A... cat

18335 18345 18355 18365 18375  
 18326: TAACTAAAAATCCAGAACTAGGGAGAGAAGACAAGCAGTGACTGCAA human  
 18025: .....G....C.....G.....T..... chimp  
 18337: .....G.....G..... baboon  
 18063: .....G....C....G.....T..... cow  
 17587: ...A.....TAG.ACT.A.G..G.G...G...TGT.....A... cat

LINE1 →

18385 18395 18405 18415 18425  
 18376: GTAAGAATTAGATACATGGGTTGAGGATCTATCTATAATCAGTAGAACAG human  
 18075: T.....A.....C..... chimp  
 18387: .....G.....G..... baboon  
 18113: T.....A.....C..... cow  
 17637: T.....G....T.....A...C...G....AC..... cat

LINE1 →

18435 18445 18455 18465 18475  
 18426: TGGATTAGTAAGCCAGAAGAGAGGTCAATATTGAATATCCAGATTAATGC human  
 18125: .....A..... chimp  
 18437: ..... baboon  
 18163: .....A..... cow  
 17687: ...C.....A.A.....GAA.....AAA.....-..... cat

LINE1 →

18485 18495 18505 18515 18525  
 18476: ACAGAGAATAGTAAAAGGGTAGAAAATATATAAAAGAACAAGATAAATAT human  
 18175: .....G..T.....TA.....G.....A..... chimp  
 18487: .....G.....A.....A..... baboon  
 18213: .....G..T.....TA.....A..... cow  
 17736: .....----.T.....A.CT..G..... cat

LINE1 →

18535 18545 18555 18565 18575  
 18526: GATTGAGTGAAAAGGTCTAAGCTAATTGCAACTGGAGATCTAGATGAAGA human  
 18225: ...A.....C.....C.....T.A..... chimp  
 18537: ..... baboon  
 18263: ...A.....C.....T..... cow

LINE1 →

18585 18595 18605 18615 18625  
 18576: AGAGAGAATGGGACTAAAGAAAATTTGAATAACTACCAGTTGAGAATTT human  
 18275: .....A.....CA..... chimp  
 18587: ..... baboon  
 18313: .....A.....CA..... cow

LINE1

18635 18645 18655  
 18626: TCCAAAACCTGATGGAAGGAATCAAACCACATATTCA----- human  
 18325: .....A.....AAAAACAAAAACA chimp  
 18637: .....A..... baboon  
 18363: .....A.....AAAAACAAAAACA cow

LINE1

18663 18673 18683 18693 18703  
 18662: -----AAAAAACCCCTACAAACTTGTAGCAGATTAAATACAGAGAAA human  
 18375: AAAAAACC.....C.....G..... chimp  
 18673: -----.....T..... baboon  
 18413: AAAAAACC.....C.....G..... cow

LINE1

18713 18723 18733 18743 18753  
 18704: ACTACGTTTCAGGCACATCACACATACATTTCTGACAAAGGCAAAAAGAAA human  
 18425: ..... chimp  
 18715: ..... baboon  
 18463: ..... cow

LINE1

18763 18773 18783 18793 18803  
 18754: ATATTAAAAGCTGCCAGATGGGAAAAACATTAATTTGAGGGGAGAAATC human  
 18475: .....T.....G.....A..... chimp  
 18765: ..... baboon  
 18513: .....T.....G.....A..... cow

LINE1

18813 18823 18833 18843 18853  
 18804: ACAAGATATGGCTGACTTTTCAACAGAAACTATTGAAATCAGAAGATGGT human  
 18525: ..... chimp  
 18815: ..... baboon  
 18563: .....T..... cow

LINE1

18863 18873 18883 18893 18903  
 18854: AGAATGGCATCTTTAGAAAAGAGGTGGAGTGGAGAAGGATACTGTCAACT human  
 18575: .....GA.....G.....C..... chimp  
 18865: ..... baboon  
 18613: .....GA.....G.....C..... cow

LINE1

18913 18923 18933 18943 18953  
 18904: TGGAATTCCTATAGTCATTGCAAAGATTCCTAAAAAGTTAAGACAAAATAA human  
 18625: .....G.....G.....-G..... chimp  
 18915: ..... baboon  
 18663: .....G.....-G..... cow

LINE1

	18963	18973	18983	18993	19003	
	↓	↓	↓	↓	↓	
18954:	AGATGC	TTTCAAATAAAAAGGTAAGAAAATCCCTTATTAGCAGAGTTGATG				human
18674:	.....	C.....			A..A	chimp
18965:	.....	T.....			.....	baboon
18712:	.....	C.....			A..A	cow

LINE1

	19013	19023	19033	19043	19053	
	↓	↓	↓	↓	↓	
19004:	ATAAATATTTAAGCCAGTTATTTAAGCTGAAGGACAATGATCCAAGATGGA					human
18724:	..---	.....		C...C...		chimp
19015:	.....			.....		baboon
18762:	..---	.....		C...C...		cow

LINE1

	19063	19073	19083	19093	19103	
	↓	↓	↓	↓	↓	
19054:	ATTATGGAATCAGAGTCCCCTGCTGGTTTTTGTGTTAGTGATGTCATATA					human
18771:	.....	A.....		A.....		chimp
19065:	.....			.....		baboon
18809:	.....	A.....		A.....		cow

	19113	19123	19133	19143	19153	
	↓	↓	↓	↓	↓	
19104:	TTTTCTTCTACACATTTTAAACTTTTAAAAGATATCATAATCATCATTTT					human
18821:	.....	.....	-.....	CT.....	TG....	chimp
19115:	.....	T.....		.....		baboon
18859:	.....	.....	-.....	CT.....	TG....	cow

	19163	19173	19183	19193	19203	
	↓	↓	↓	↓	↓	
19154:	AATTATCAATACTATTTTGTATTTTCTATTAATTTACCTTTCCCAATAT					human
18870:	..C.G.....	A.....	A.....		C.....	chimp
19165:	.....	A.....			.....	baboon
18908:	..C.G.....	A.....	A.....		C.....	cow

LINE1

	19213	19223	19233	19243	19253	
	↓	↓	↓	↓	↓	
19204:	TCATATTCCTTTTTGCAATTCCATAATTCCATCTGGGCTCATTTTAAGTA					human
18920:	G.....	A.G.....			T...	chimp
19215:	.....				.....	baboon
18958:	G.--.....	TG.....			TT...	cow

LINE1

	19263	19273	19283	19293	19303	
	↓	↓	↓	↓	↓	
19254:	CTACTGAATGGTGGTGAGTTTCCCATTTTGCTTTTTTTCTGCTATCCTGC					human
18970:	.....	C.....		C.....	T....	chimp
19265:	.....			.....		baboon
19006:	.....	C.....		C.....		cow



LINE1

19313 19323 19333 19343 19353  
 19304: AGCCTGGACACAAGGCAGCAAAACCGTGAAGTGGGAGCTGGCATGGACAG human  
 19020: G..... chimp  
 19315: ..... baboon  
 19056: ..... cow

LINE1

19363 19373 19383 19393 19403  
 19354: AAAAGCATACAGGAAAGGTATCTGGATTCAAGTAGTGTGAAAGAGATTTTC human  
 19070: .G.G.....A.....G.....A..G..... chimp  
 19365: ...G..... baboon  
 19106: .G.G.....G.....A..C..... cow

LINE1

19413 19423 19433 19443 19453  
 19404: TAACATACTCATAGTGAGTGGGAGAAGTTCCCTGGGCTCCCCCTTTTAA human  
 19120: .....C.....T..T..... chimp  
 19415: ..... baboon  
 19156: .....T..T..... cow

LINE1

19463 19473 19483 19493 19503  
 19454: TTCTTTCACATTCCACACCCCTAGGCAAACCTATGTCAATGTTGGCAGCA human  
 19170: .....C.....C..C..... chimp  
 19465: .....A..... baboon  
 19202: .....C.....C..... cow

LINE1

19513 19523 19533 19543 19553  
 19504: GTGACAACAGCAGCAGTGAGAGCCCATAGGTGCTTAAAACCTCTGAGAGAT human  
 19220: .....GT.....CT.....T.....A.. chimp  
 19515: ..... baboon  
 19252: .....GT.....CT.....T.....A.. cow

LINE1

19563 19573 19583 19593 19603  
 19554: GGGAAACTTTCTCTCCAGAGGAACTGTGTTCCCAAAGAGATGAGATGAAA human  
 19270: .....G.....A..--.....A..... chimp  
 19565: .....C..... baboon  
 19302: .....G.....A..--.....A..... cow

LINE1

19613 19623 19633 19643 19653  
 19604: TTCCATAGCTTTTTTTTCCCCCTCCTTCTTCTGCCATGTGGTCCTAGAC human  
 19318: .....-.....C.....T.....G..... chimp  
 19615: ..... baboon  
 19350: .....-.....C.....T.....G..... cow

LINE1

19663 19673 19683 19693 19703  
 19654: ATGGGTGTAATACATACAGGAAATGTATGGCAGAGTGAGACAACCTAAAGC human  
 19367: .....----G.....TG..... chimp  
 19665: ..... baboon  
 19399: .....----G.....TG..... cow

LINE1

19713 19723 19733 19743 19753  
 19704: TGAAGTTTCTGGCCAGAGGACCAAAAAGAGGAATCCTTGAAAATCAGAAA human  
 19413: CA.....T.....G..... chimp  
 19715: C..... baboon  
 19445: CA.....T.....G..... cow

LINE1

19763 19773 19783 19793 19803  
 19754: GTACTTAGGTAGTCAGGCGGAATGAGAATCTTGGGAAAACAGTCATATAA human  
 19463: .....A.....A.A.....G..A..... chimp  
 19765: .....G..... baboon  
 19495: .....A.....G.A.....G..A..... cow

LINE1

19813 19823 19833 19843 19853  
 19804: AGTTGTATGTGAAGTCCTGTGCTTACCCTCTAAGTTACGTACATGTGGAT human  
 19513: ....A.....G..G...T..... chimp  
 19815: ..... baboon  
 19545: ....A.....G..G...T....C..... cow

LINE1

19863 19873 19883 19893 19903  
 19854: TTGCCCTAATGATCACATCAAAAACTTTGAGAATGGAACATATGGGATAG human  
 19563: .....T.....C....A..... chimp  
 19865: ..... baboon  
 19595: .....T.....C....A..... cow

LINE1

19913 19923 19933 19943 19953  
 19904: ACCACAATCCAGGTCCAAGACAAGACAATGGGTTTTACACATGAGACAGG human  
 19613: .....T..... chimp  
 19915: ..... baboon  
 19645: .....T..... cow

LINE1

19963 19973 19983 19993  
 19954: CATGAATAGAATTACAAAGCCTTTGAAAACCTGAACCTAACATCAGA human  
 19663: .....C.....G..... chimp  
 19965: ..... baboon  
 19695: .....C.....G..... cow



## Annotations legend



## Underlays legend

- fwd\_exon : LightBlue
- fwd\_UTR : LightOrange
- rev\_exon : LightBlue
- rev\_UTR : LightOrange
- intron : LightYellow

