

Homo_sapie 138 CAC--GG--CTGGGAG--CGGG--CG-G----- 156
Pan_troglo 134 CAG--CT--CTGCCCC--CTTG--CA-GA----- 153
Mus_muscul 126 CAG--CG--CCGCCCA--CCC GC--CA-GGAAAGAG--G--G-- 154
Rattus_nor 111 --G--CG--ATGTGCA--AGCGG--CA-GCCTAGGGTGGGGTGGGACT 148
Cavia_porc 115 CGC--CTCCCGGGCC--CTTC--CA-AG----- 136
Danio_reri 1 ----- 0
Oreochromi 121 GACTTCT--CTGTGATATTTCGGAACAATTA----- 148

cons 193 [conservation bars] 240

Homo_sapie 157 --C-----GG-----G-----G-----A-GG-CC--AG 168
Pan_troglo 154 -AC-----GG-----GTT-TG-----A-ACA-----GA-GG-CA--AT 174
Mus_muscul 155 -----CATCAG--A-GGGTGG-----A-C-G-CCTGC-G----- 176
Rattus_nor 149 GACTCACTTTGGAAAGTTTGG-----A-A-ATCCTGC-G--CCGAT 183
Cavia_porc 137 -ACT-----GT-----GTTTGG-----A-C-A-----GCAGGAGG--AT 160
Danio_reri 1 ----- 0
Oreochromi 149 -----AAGTGGGCTTTAGAGA-A---GTTTGTGA--AT 175

cons 241 [conservation bars] 288

Homo_sapie 169 C---ATGGAGA--GGGAA--AAGCG-----GG----- 188
Pan_troglo 175 C---TCGGCGGCTGG--A-TGGGG-----GGCCCTGC-----C--- 201
Mus_muscul 177 --GGACCGCCGG--TGG--TGTGCGTCAACGTCCGATC-----C--- 209
Rattus_nor 184 TGGAA--CGGGGG--TGG--GGGGGGCG--CTTAT--TTC-----C--- 215
Cavia_porc 161 C---CCGGTGGCTGG--T--TAGGG-----GTCCAGC-----C--- 187
Danio_reri 1 ----- 0
Oreochromi 176 T---ATAAAG--AGG-----AAGCGAAAGACACTC 200

cons 289 [conservation bars] 336

Homo_sapie 189 -----CGGCC-----CG--GGG--CG-- 200
Pan_troglo 202 -----CTGCCAGAC--TCC--TCAGTGAG-----C--CTCC--AGG--G-- 230
Mus_muscul 210 -----CCGCC--GGC--CA--CCCAA--GAGGCCGC--CGCCCGGGC-- 242
Rattus_nor 216 -----CTGCC--GG-----C-- 223
Cavia_porc 188 -----CTACC--GGC--TCC--CCAATGAA-----CACTCCAGACTGGT 221
Danio_reri 1 ----- 0
Oreochromi 201 GATTAAACTGA-----T----- 212

cons 337 [conservation bars] 384

Homo_sapie 201 -TGG-----GGTTCTG-----GAGTC--CCGG-- 219
Pan_troglo 231 -TGG-----GGGGCAA-----CGCTTCGGA 249
Mus_muscul 243 -TGCGG-----GCAGCTG-----GC-- 256
Rattus_nor 224 -TCCAG-----G-AACTG-----GG-- 236
Cavia_porc 222 GTGGGG-----GGTGCAA-----AGTTTGGCA 243
Danio_reri 1 ----- 0
Oreochromi 213 TTGAGTGATTTAAACGTGGTGCTGTATAATTATGATCGGAGTATTAAA 260

cons 385 [conservation bars] 432

Homo_sapie	220	G-----ATCAGGGAGGACCGACCTT-----CCCCCTC--GATC	250
Pan_troglo	250	GAG--TAG-CCCACCTTGTCTC-----TG-----C-----T--TTTC	276
Mus_muscul	257	GAG--CAGGCATG-----C-CAC-----GGCTCCTGA-----C	281
Rattus_nor	237	GACTCCTGTCTGTA-GTAA--C-----CAACTGC-----ACTCT-TC	268
Cavia_porc	244	GAC--TGG-CCTGAGTTGTCTC-----CG-----G-----T--TTCC	270
Danio_reri	1	-----	0
Oreochromi	261	AAG--TGGCATAAATAA-----	275

cons	433		480
------	-----	--	-----

Homo_sapie	251	C-CCCC--GTGGAGGCG--G-AC-TCGCGC--CG-----	275
Pan_troglo	277	C-CCCCTGCGTCCAGGCG--GCACATCAGGC--CA-----	307
Mus_muscul	282	G-C-----CC--TTGCTCTGCCAACGCTGCTG-----	306
Rattus_nor	269	T-C-----CCAGTAGTTGGAGAGAA--CT--G-----	290
Cavia_porc	271	CTCTTCCTGC--CCAGGCGTGG--CC-TG-GGC--GG-----	299
Danio_reri	1	-----	0
Oreochromi	276	-----GTCTCGATGAAA-----	287

cons	481		528
------	-----	--	-----

Homo_sapie	276	-----CCC-----GTG-----CCTGGAGCCGAGTTAG	297
Pan_troglo	308	-----TCC-----CAC-----CCTGCTTC--AAGCAG	327
Mus_muscul	307	-----CCCGCGCTCG-----CC--GC--AAG-AG	325
Rattus_nor	291	-----CCTACCCCTTT-----CCT--TAA--AAG-TG	311
Cavia_porc	300	-----TCC-----CTC-----CCAGTTG-----GGAG	316
Danio_reri	1	-----	0
Oreochromi	288	GTTTTTCGAGCTTCTC--TTGGCCGTGGGAAAGTGAA-----	321

cons	529		576
------	-----	--	-----

Homo_sapie	298	-GA-----GG-CCGGTGTGGGGTGCTGG-----	319
Pan_troglo	328	-GA-----C-----GTGTTCCCTGCTGCT-----	345
Mus_muscul	326	-----GTA-----G--GCT-----	332
Rattus_nor	312	GG-----GTTTTATGTGATGCT-----	328
Cavia_porc	317	-GG-----TGACTTGTT-----CACCTGC-----	334
Danio_reri	1	-----	0
Oreochromi	322	-GAAGCCAGAA-----GCTGCAGTGCGCTTGGCTGA-----	351

cons	577		624
------	-----	--	-----

Homo_sapie	320	--GC-----CCC-----G-----GA-----	327
Pan_troglo	346	--CC-----CCTTCCCCCATTCT-----GA-----	365
Mus_muscul	333	--CCCGCGAGCCCGCCAACTT-----CGGGCGCCT--TTCAAAA	366
Rattus_nor	329	--CCAGTTTGGCCCCCACTT-----CGGG--GCTTAAAT-----	358
Cavia_porc	335	--C-----ACTTAACCCACCTGCT-----	351
Danio_reri	1	-----	0
Oreochromi	352	CTC-----	354

cons	625		672
------	-----	--	-----

Homo_sapie 328 -----G-----GCCCTAC--TCC-----GGGC-----CCGCCC 348
Pan_troglo 366 -----C-----TACAGAAC--TCT-----GGGC-----AGAATG 387
Mus_muscul 367 ACTTCTGTTG-----CGCCCT----- 382
Rattus_nor 359 -----TC----- 360
Cavia_porc 352 -----CCCCTCC--TGCCCTGT-----GGGCCCTGGCAAAACG 382
Danio_reri 1 ----- 0
Oreochromi 355 -----CGCCGGTGTGCG----- 367

cons 673  720

Homo_sapie 349 -----TT-----CACCCGCCGCG 361
Pan_troglo 388 -----TT-----GAC--GCCCCT 398
Mus_muscul 383 -----GCGCACGCTTTGGGTAGATAGG----- 404
Rattus_nor 361 -----TTAAGATGGGGTGG----- 374
Cavia_porc 383 TGCAAAGCCCCTT-----G----- 396
Danio_reri 1 ----- 0
Oreochromi 368 ----- 367

cons 721  768

Homo_sapie 362 CGT-----GGGGCT-----TGCCG-- 375
Pan_troglo 399 T-TGGTTT-CATGGAGGGGCT-----TCCTG-- 422
Mus_muscul 405 -----AG-----T----- 407
Rattus_nor 375 -----GAGGGGCT-----TGATT-- 387
Cavia_porc 397 --GGCTT--GAGTGGTT-----TCCTG-- 414
Danio_reri 1 ----- 0
Oreochromi 368 -----TAAATGAAGATGTTGGGAGCTATTCTGTC 396

cons 769  816

Homo_sapie 376 -----C-----CGG-----TCG 382
Pan_troglo 423 -----CGCACCCGT----- 431
Mus_muscul 408 -----AA-----GGGAC----- 414
Rattus_nor 388 -----AA-----TAGCC----- 394
Cavia_porc 415 -----CA-----CTGTC-----CCCCAGTCACCCCAGTGTTCGGAGGGTCG 450
Danio_reri 1 ----- 0
Oreochromi 397 CGCTCATTGC----- 406

cons 817  864

Homo_sapie 383 GCCGGGCGGGCGGGCTGCC--T-----ACT--ATTTTTTCGAT----- 415
Pan_troglo 432 -----GC-----C-----CAGCAACCCAT-----GAT----- 449
Mus_muscul 415 -----CAGCTGC-----CA-----GAG----- 426
Rattus_nor 395 -----C-----CTTC-----CC-----GAG----- 404
Cavia_porc 451 G--GGGCTGG--GGGCAGATCC--AAAGC--CC--GGG----- 478
Danio_reri 1 ----- 0
Oreochromi 407 -----A-----GAGCAGTC 415

cons 865  912

Homo_sapie	416	---	TT	---	GAA	---	TAG	---	AGTC	-----	427
Pan_troglo	450	---	AC	---	TGAG	---	CAG	---	AGTG	-----	462
Mus_muscul	427	---	TTGAG	---	AGC	---	CAG	---	AGCG	-----	441
Rattus_nor	405	---	AATAG	---	G	---	GTG	---	GAATT	-----	418
Cavia_porc	479	---	TTAAGGAG	---		---	GGG	---	AGGG	-----	493
Danio_reri	1									-----	0
Oreochromi	416	ACAC	TAAATCAG	---	CTG	---	AGCT	---	CATGCGGTAGATGCAGCAATGATGGAA	-----	461

cons	913										960
------	-----	--	--	--	--	--	--	--	--	--	-----

Homo_sapie	428	-----					GGTTTT	---	GGTTTC	---	CTGTTGCT	---	TCTCCGG	-----	454	
Pan_troglo	463	-----					CGTCCG	---	GGTA	---	GGGGGC	---	GGACGAT	-----	486	
Mus_muscul	442	-----					GG	---		---	T	---	G	---	GACCG	450
Rattus_nor	419	-----					CC	---		---	T	---	TCTAAGT	-----	428	
Cavia_porc	494	-----					GG	---		---	CT	---	GCGACGG	-----	504	
Danio_reri	1													-----	0	
Oreochromi	462	CCACGATCCAAAGCTAACTA					AGT	---		-----				-----	484	

cons	961														1008
------	-----	--	--	--	--	--	--	--	--	--	--	--	--	--	------

Homo_sapie	455	G	-----				CCATT	---	TAT	---	CTTCTTTCTT	---	CTTCG	-----	478
Pan_troglo	487	G	-----				CCCCT	---	TGG	---	CTGGGTGCAGT	---		-----	507
Mus_muscul	451	G	-----				ACCGTGG	---	GACCTGGTGT	---	CCTGGC	---		-----	474
Rattus_nor	429	G	-----				AGGTTTC	---	TAA	---	GACCCCC	---	TCCCTGGG	-----	454
Cavia_porc	505	T	-----				CCA	-----						-----	508
Danio_reri	1													-----	0
Oreochromi	485	GAACGCAA	---				CATT	---	TA	-----				-----	498

cons	1009															1056
------	------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	------

Homo_sapie	479	CT	TCTGGC	---	CCAC	---	GCCG	---	GGGC	---	GGATGTTGGG	-----		-----	508	
Pan_troglo	508	C	-----		CC	---	GCCC	---	CCAGG	---	TAACAA	---	GGACCTTCGG	---	TGGTGGTGGT	546
Mus_muscul	475	-----												-----	474	
Rattus_nor	455	-----												-----	454	
Cavia_porc	509	-----												-----	508	
Danio_reri	1	-----												-----	0	
Oreochromi	499	-----												-----	498	

cons	1057															1104
------	------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	------

Homo_sapie	509	GCGCG	---	GAG	---	TGTG	-----									G	521
Pan_troglo	547	GCGGGT	---	GAGACTGAC	-----											C	562
Mus_muscul	475	---	GTGTGAGGAGGAC	---	CCCTTCT	---					CTTTCAGGG	---	GTACC	---	C	509	
Rattus_nor	455	---	TGCGGCGGGGGCTGCC	---	CCTGGAGATGC	---	CTG	---					CGAA	---		488	
Cavia_porc	509	---	GGCTGAC	-----												C	516
Danio_reri	1	-----															0
Oreochromi	499	-----															498

cons	1105																	1152
------	------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	------

Homo_sapie	522	GCTC	-----	TGC	-----	G	-----	529
Pan_troglo	563	TCTCTT	-----	CTCC	-----	T	-----	573
Mus_muscul	510	ACTTTT	-----	CTCA	-----	TAGCG	CCCCAAAGACGCTGG--A	539
Rattus_nor	489	-CAGGTATTGGGT	G-----	-----	-----	-----	TCGGAGGAGGCGGGGCA	518
Cavia_porc	517	TC	-----	CTCC	-----	T	-----	524
Danio_reri	1	-----	-----	-----	-----	-----	-----	0
Oreochromi	499	-----	-----	ATTTTTTTCT	-----	T	-----	509

cons 1153  1200

Homo_sapie	530	-----	G	-----	CGCCG	CGTTTCG	CTTCACT	-----	549
Pan_troglo	574	-----	G	-----	C	-----	CCC	-----	578
Mus_muscul	540	AGTGTGGT	-----	ATGGGGCC	-----	-----	CCGGAGGCCCA	566	
Rattus_nor	519	GG	-----	TCTCCG	GGTGC	GGCC	-----	546	
Cavia_porc	525	-----	G	-----	C	-----	C	527	
Danio_reri	1	-----	-----	-----	-----	-----	-----	0	
Oreochromi	510	-----	-----	-----	-----	-----	-----	509	

cons 1201  1248

Homo_sapie	550	-----	G	-----	-----	-----	-----	550
Pan_troglo	579	-----	TGCCTAG	-----	-----	-----	-----	585
Mus_muscul	567	-----	-----	-----	-----	-----	-----	566
Rattus_nor	547	GGAGGC	GGCCCTG	-----	-----	-----	-----	559
Cavia_porc	528	-----	TTCCAG	-----	-----	-----	-----	534
Danio_reri	1	-----	-----	-----	-----	-----	-----	0
Oreochromi	510	-----	TACTCTAAATTTATATCAAGAATTTTATCAACAAAT	-----	-----	-----	-----	545

cons 1249  1296

Homo_sapie	551	-----	AC	-----	CC	-----	GCGC	-----	558
Pan_troglo	586	-----	GC	-----	CC	-----	GCGA	-----	593
Mus_muscul	567	-----	-----	ACCCTGGCTC	-----	GC	-----	578	
Rattus_nor	560	-----	GCGCG	ACAATGGG	CC	-----	GCTC	578	
Cavia_porc	535	-----	GC	-----	CT	-----	GCGC	542	
Danio_reri	1	-----	-----	-----	-----	-----	-----	0	
Oreochromi	546	CTTTTTT	GAGGC	-----	TT	TATAAAA	ACGA	TATTTAGAGTGT	582

cons 1297  1344

Homo_sapie	559	-----	-----	-----	-----	-----	-----	558
Pan_troglo	594	-----	-----	-----	-----	TG	-----	595
Mus_muscul	579	-----	-----	-----	-----	ACTT	GGGTAGAC	590
Rattus_nor	579	-----	-----	-----	-----	TGATTCC	GGGCCGGC	594
Cavia_porc	543	-----	-----	-----	-----	TG	-----	544
Danio_reri	1	-----	-----	-----	-----	-----	-----	0
Oreochromi	583	TAGACAATAAACTGCCTATTTGTAAGCTGTTA	TG	-----	-----	-----	-----	616

cons 1345  1392

Homo_sapie	559	-----GG-----CCGG-----	564
Pan_troglo	596	-----CTCCCAGCCCGGTGAGACCTGCCTGAATGGCGGGAAGT-----	633
Mus_muscul	591	GCTCCTGGGGCTCGCCGCGGG-----GGCGGACATG-----	621
Rattus_nor	595	GCTT-TGTT-----GGAGGGCGGG-----	612
Cavia_porc	545	-----CTCCCAGCCTGGT-----ACCTGCAGAGAACGGAGGGCGGT-----	579
Danio_reri	1	-----	0
Oreochromi	617	-----	616

cons 1393  1440

Homo_sapie	565	-----GCTGGGTCCCCG-----GG	578
Pan_troglo	634	GT-----GAAGCGGCCAAT-----GG	649
Mus_muscul	622	CTGCTTGCGCCTCTACTTTTCGATTTGAATCG---AATCGGTTTTGGT	666
Rattus_nor	613	GTG-----GCGGG-----	620
Cavia_porc	580	GT-----GAAGTGCTGAAC-----GG	595
Danio_reri	1	-----	0
Oreochromi	617	-----AACACTTTAAT-----GT	629

cons 1441  1488

Homo_sapie	579	CTCCTGGTGGCCCGCCCGCCGGTGCCCC---CAGCCCGGC--T	618
Pan_troglo	650	CAC--GGA---GGCCTGCGTGTGAGTACCACCCCTG-CGGGACCT	688
Mus_muscul	667	T-----TCCT	671
Rattus_nor	621	CTC--CGC-----AGCT	630
Cavia_porc	596	CAC--AGA---GGCTTGCATGTGAGTAAACCCCCCG--CGGGGACCT	634
Danio_reri	1	-----	0
Oreochromi	630	AAA-----AT	634

cons 1489  1536

Homo_sapie	619	-----CTCAGTT-----	625
Pan_troglo	689	-----GTTGCTT-----	695
Mus_muscul	672	-----GTTGCTT-----	678
Rattus_nor	631	-----GTCGCTT-----	637
Cavia_porc	635	-----GTTGCTT-----	641
Danio_reri	1	-----	0
Oreochromi	635	ATGAGATAATGGAAGTTGCGGAGGGACGCGGATTTAGGGGGGGGGGG	682

cons 1537  1584

Homo_sapie	626	-----T-----G-----GGGGAGGGG-----TTGCG	641
Pan_troglo	696	-----T-----GTCG-AGGGCAGAGCCCCTGCCCT	718
Mus_muscul	679	-----CTTG-----	682
Rattus_nor	638	-----TTTCCACGATCC-----GG-----	652
Cavia_porc	642	-----T-----TGCTGGGAGCAGAGCCCCTGCAT	665
Danio_reri	1	-----	0
Oreochromi	683	ATGCAAGCACCTTT-----	696

cons 1585  1632

Homo_sapie	642	TAAGAAGCCGC	CGC	GCC	CGG	GGGGACT	-GAA-	CTTTC	-----	676	
Pan_troglo	719	TCTGCAGCCGC	---	GCA	---	GGGGACA	-GAACACTAGG	---	-----	749	
Mus_muscul	683	-----	-----	-----	-----	GGACCAT	AT	TATTTT	CATT	T	702
Rattus_nor	653	-----	-----	-----	-----	GGAGCT	---	GA	---	GTGTGGCCA	669
Cavia_porc	666	TCT	---	---	---	GGGGACA	-GAACACTGGG	---	-----	---	685
Danio_reri	1	-----	-----	-----	-----	-----	-----	-----	-----	---	0
Oreochromi	697	-----	-----	-----	-----	-----	-----	-----	-----	---	696

cons 1633  1680

Homo_sapie	677	-CTTTTGCTT-	-TGCGG-	-----	-----	-----	-----	AGTTGA	----	696	
Pan_troglo	750	-CCATTGTCTTCT-	-GG-	-----	-----	-----	-----	AGATGGCCCA	-----	773	
Mus_muscul	703	TCT-TTGCCTCC-	-GGCCC-	-----	-----	-----	-----	GTGCTAGGG	CGG	---	731
Rattus_nor	670	CCCCCTCCCTCCTGC	GGCCC	CCTCGTATCTT	GTGTTTGA	ACTG	---	---	---	A	713
Cavia_porc	686	-CCATTGTCTTCT-	-GG-	-----	-----	-----	-----	TGGCAGCCCA	-----	---	709
Danio_reri	1	-----	-----	-----	-----	-----	-----	-----	-----	---	0
Oreochromi	697	---	TGTCTACA	-AG-	-----	-----	-----	TGTGGGAGAG	-----	---	716

cons 1681  1728

Homo_sapie	697	-AGTTTGGA	---	---	---	A	G	---	CTTGGGGG	CGGA	719
Pan_troglo	774	GAGTCTGGGC	---	---	---	AC	G	---	GTCACGTG	GCTGA	798
Mus_muscul	732	-TGTTGGGGT	---	---	---	GCAGTGTG	AGGTCAG	GGG	---	---	758
Rattus_nor	714	-AGCAAGGGT	---	---	---	GGAGGTTG	---	GTCGGGGG	GCT	---	740
Cavia_porc	710	T-GGCCGGGT	---	---	---	GC	G	---	GTCACGTG	GCTGA	733
Danio_reri	1	-----	-----	-----	-----	-----	-----	-----	-----	---	0
Oreochromi	717	TGTTGTGAGT	GCCGGGTAGG	CGGGGG	GTGGTGGAGG	AGGAGGC	GCTGT	---	---	---	764

cons 1729  1776

Homo_sapie	720	GAGCGGG	GACGCGGGTGGGGGG	CTCTTAC	ATT	-----	TCTCCCCG	CG	759		
Pan_troglo	799	CTTTT	-----	-----	ATT	-----	G	---	G	808	
Mus_muscul	759	-----	-----	-----	-----	-----	-----	-----	---	758	
Rattus_nor	741	-TTTTC	-----	-----	---	TG	---	---	GG	749	
Cavia_porc	734	CTTTT	-----	-----	---	ATT	---	G	---	G	743
Danio_reri	1	-----	-----	-----	-----	-----	-----	-----	---	0	
Oreochromi	765	---	T	---	---	ATT	CCCGTCTG	CCCGGTAA	---	785	

cons 1777  1824

Homo_sapie	760	CGCACAG	CGAGCGGGTCTC	-----	---	T	G	---	---	GGA	785
Pan_troglo	809	---ACAA---AG	---	TC	---	T	G	---	---	G	819
Mus_muscul	759	-----	---	CGCTAT	---	ACT	C	---	---	TCG	771
Rattus_nor	750	-----	---	CTCCTT	AATCC	ACT	---	CCACT	---	TCG	772
Cavia_porc	744	---ACAA---AG	---	TC	---	T	G	---	---	G	754
Danio_reri	1	-----	-----	-----	-----	-----	-----	-----	---	---	0
Oreochromi	786	CAATACC	CGAGGAGAGTGT	---	---	TTAT	G	---	---	G	811

cons 1825  1872

Homo_sapie	855	CGGCTC-TGTGT-----CACACCCCCCTCC	CCCGTTTCTCAGCCCC	894
Pan_troglo	864	TGGCTGCTGGGGGCTTGGGCACTC-----C	-----	888
Mus_muscul	863	-----	-----	862
Rattus_nor	840	-----	-----	839
Cavia_porc	804	---GCCGGAGGTGGGCGAA--C---TC	-----	822
Danio_reri	1	-----	-----	0
Oreochromi	910	-----	-----	909

cons	2113			2160
------	------	---	--	------

Homo_sapie	895	GGTAAGA--TGGGG-----A-----GGGAGGGGC-----	916
Pan_troglo	889	--TCCG--TGGGC-----C-----ACCTCAGGCTCCGG	912
Mus_muscul	863	---GAAGAAGGGC-----GATGTGCAAGCG-----GCTT	888
Rattus_nor	840	---GAAT-GGGGC-----TGTACA-----CCT	857
Cavia_porc	823	---CG--TGGGCACCTTGGGC-----TGG-----AGCGG	846
Danio_reri	1	-----GGTCCGAAGTCCAG	15
Oreochromi	910	-----	909

cons	2161			2208
------	------	--	--	------

Homo_sapie	917	-TTGA-----GT	922
Pan_troglo	913	GATCA-----CT	919
Mus_muscul	889	GCTGC-----CT	895
Rattus_nor	858	GCCAC-----AT	864
Cavia_porc	847	CAGTC-----CT	853
Danio_reri	16	ATGAACATTAATGAGTGTGCGTCGAACCCGTGTCTGAACCAGGGCTCC	63
Oreochromi	910	----AAAAAAAAAAAAAAAAAAGCCACGCACCACGCGCTTCTAGCCT	953

cons	2209			2256
------	------	--	--	------

Homo_sapie	923	AATT-GA-----TCC--CT--TCTCG-----	938
Pan_troglo	920	AAGT-GGGAGTCCCAGTACCCCAATTCTTCTTTAAGTCCCCA-----	960
Mus_muscul	896	AGGGTGGGCGTGGGACTGACTC-----ATT-----	920
Rattus_nor	865	AGCCA--GCCTATCCCTTCCCC-----ACTAGTT	891
Cavia_porc	854	AGGA-GGGAATCCTTG-GTGCTATTTCTTCTCTAAGTTCCTG-----	893
Danio_reri	64	TGCATTGACGACGTGGCTGGATTCAAGTGCAACTGCATGCTGCCGTAC	111
Oreochromi	954	-----	953

cons	2257			2304
------	------	--	--	------

Homo_sapie	939	-----AGATG-----GGGTCG-AATTCC	955
Pan_troglo	961	-----AGAAA-----CAGTTG-AT-----	973
Mus_muscul	921	TCGGAAGTTTGAAAATCCT-----GTGCTG-ATTGGAA---C	953
Rattus_nor	892	TTTGAC-TG-----CCACGCTGTGAGCAGAA--C-ATTG-AT---	923
Cavia_porc	894	-----AGAAA-----CCATTG-AC---C	907
Danio_reri	112	ACAGGTACAAACTCCACCATTGTTTTCTTCTGCCAAAACAGCACAGAG	159
Oreochromi	954	-----	953

cons	2305			2352
------	------	--	--	------

Homo_sapie	956	TTCCGAATG-----GGGG-----A-CCT--TCATCCCCTC--C----	984
Pan_troglo	974	-----CTGCCAGGGGA-----A-GCTCTGGA-CCATTTA--C-----	1001
Mus_muscul	954	GGGAGCCGGAGAGGGG-----AGCC-CT--TATTTCCCTTC--CG--G	989
Rattus_nor	924	-----CCGTA-AGGGCTACCCAGAAAGC-----TCCCCTC--CCACG	957
Cavia_porc	908	TTGAGAGTG-----GGGGCAGAA-GCA-----TTTA--C-----	933
Danio_reri	160	TCGTGAAATAACACTGTAGAGTCGAGGGTGGCTGCTCCAGTAGATTTA	207
Oreochromi	954	-----CACC-----	957

cons 2353  2400

Homo_sapie	985	-----	984
Pan_troglo	1002	-----	1001
Mus_muscul	990	CTTCACAG---AACGGG--GTA-CTCCTGTTGT---AGTAACCAACT	1027
Rattus_nor	958	CTTCACC TCCGGACTGCCAGTAACTCTAG---TACATAGGCACCATG-	1001
Cavia_porc	934	-----	933
Danio_reri	208	TTTCCTGTTTGGCCACTTCTGTTTCCGGACGAGCCTAAGAATTGACA	255
Oreochromi	958	-----	957

cons 2401  2448

Homo_sapie	985	-----T-----	985
Pan_troglo	1002	-----T-----	1002
Mus_muscul	1028	GCACTCTTC TCCCAGTAATCGA-----	1049
Rattus_nor	1002	GCTTTAGTCTCCGTC-----CA-----	1018
Cavia_porc	934	-----A-----	934
Danio_reri	256	ATAGGAGGAAACGCAGAGGGACTTCTGCTGTGAGGAAACCGATAAGG	303
Oreochromi	958	-----AGTGTCCACGAACAGGCTTCCCAATAT	984

cons 2449  2496

Homo_sapie	986	-----	985
Pan_troglo	1003	-----	1002
Mus_muscul	1050	-----	1049
Rattus_nor	1019	-----	1018
Cavia_porc	935	-----	934
Danio_reri	304	AAGTGCTTGCTTGAAAAATCAGGCAATAGAAGAGAGAGGCTTAAATA	351
Oreochromi	985	CCCCTGCGGACACTTGTGGAACAAATCAATTTAAAAATCACGACGCGT	1032

cons 2497  2544

Homo_sapie	986	-----	985
Pan_troglo	1003	-----	1002
Mus_muscul	1050	-----	1049
Rattus_nor	1019	-----	1018
Cavia_porc	935	-----	934
Danio_reri	352	GCAGACACAGATTTACTGCTGGACTCAATCAACTGAGTTTTTTTACT	399
Oreochromi	1033	GTGCATTAAAAATTTGCTAATAAAGCTGTGTTAAAAAACAAAAACAAA	1080

cons 2545  2592

Homo_sapie	986	-----GTGGGT-----G-----	992
Pan_troglo	1003	-----GAGAGGC-----C-----	1010
Mus_muscul	1050	-----	1049
Rattus_nor	1019	-----	1018
Cavia_porc	935	-----GAGAGCCCCGCCCCAGGCAGCCTAG	960
Danio_reri	400	GATATTGAGGGGTAAAGCTGCAGGATAGACTTCAATAGGGTCTGCTGT	447
Oreochromi	1081	CTTAACTGCTGAATAAATTCCTC-----	1103
cons	2593	-----	2640

Homo_sapie	993	-----TATG	996
Pan_troglo	1011	-----CAGC	1014
Mus_muscul	1050	-----AGG	1052
Rattus_nor	1019	-----CCG	1021
Cavia_porc	961	GCTTCTCTGGGCAGATGGGCTTTTTGCTGCTTGAGGGAAAATCGGAAC	1008
Danio_reri	448	TTAGTTATAGCAGCATTAAATGTTCTTTATGTACTATTTGTGGTAATA	495
Oreochromi	1104	-----	1103
cons	2641	-----	2688

Homo_sapie	997	GGGG-----CTGCC-----CTG	1008
Pan_troglo	1015	CCCCACCACCCTGCC-----AACTTGGGGCGCCTCCTC-TGGGC	1052
Mus_muscul	1053	AGAGAAC-----TGC	1062
Rattus_nor	1022	GCAGGAC-----CGA	1031
Cavia_porc	1009	CAAGCCACCCTGGCTTGGCCTCA-----CTTTCTCCTGGGCTC	1047
Danio_reri	496	TGCTATTAGCTTTAATTGTTATTTATTTATTTATTTATTTATTTATTTAG	543
Oreochromi	1104	-----	1103
cons	2689	-----	2736

Homo_sapie	1009	-----GAG	1011
Pan_troglo	1053	-GG-----GTG	1057
Mus_muscul	1063	-----CTGCCC-----TTTCCTTAAAAGTGG---GGTT	1087
Rattus_nor	1032	-----GACTGACCTCTCTCTTCTGACCCCTTCCCAGGCT	1065
Cavia_porc	1048	TGGGTGAGGCTGGAG	1062
Danio_reri	544	TTGTTATATTTATAATTATTTAATATGTTTATTATATTTATTTATTTA	591
Oreochromi	1104	-----GTG	1106
cons	2737	-----	2784

Homo_sapie	1012	-----ATGCG-----CGCCGC---GGAGGC	1029
Pan_troglo	1058	-----ATGC-----CTCCTGG---GCA---C	1072
Mus_muscul	1088	TTATGTGACGC	1098
Rattus_nor	1066	T---GAGATGC	1073
Cavia_porc	1063	-----AAGTTGGAAGTCTCTTGCTGGTGTACCTGCCGTGGTGGG	1103
Danio_reri	592	TTTATTATGTTTATTATCTATATTTATTATGTTTATTATATTTATGTA	639
Oreochromi	1107	-----ATTTC-----ACCT	1115
cons	2785	-----	2832

Homo_sapie	1030	AGGTATTGGGTGTCGGCGGAGGCGGGGCCGCGTCCCCAGGGTG---C-	1073
Pan_troglo	1073	AGGTGATGCCTCCTCTCGGAG-----GTGATGCT	1101
Mus_muscul	1099	-----TC-----GAG-----CTCAGCCC	1111
Rattus_nor	1074	-----TC-----C-----	1076
Cavia_porc	1104	AGGT-ATGGGTGCC--CCAAGTCTGG-----C	1127
Danio_reri	640	TTATGTTTATTTATTTATGTGTCTTATATTTATGTATTTATTATGTTT	687
Oreochromi	1116	-----	1115

cons	2833		2880
------	------	--	------

Homo_sapie	1074	---TGTCCCGGTG--CCCCTG-----	1089
Pan_troglo	1102	TCCTA----GGTG--GGTGGT-----	1116
Mus_muscul	1112	TACATCGAGGCTTAATTTTAA-----	1132
Rattus_nor	1077	--CAGCCAAGTGGGA-----	1089
Cavia_porc	1128	TCCAGTGC---TGGTCACTTA-----	1145
Danio_reri	688	ATTTGTTTATTAATTTATTTTGTTTATTTATTATGTTTCATATATATTT	735
Oreochromi	1116	-----GCAACTTAATCCCGATTAATCCAGTGT	1143

cons	2881		2928
------	------	--	------

Homo_sapie	1090	-----GAGGCGGCC--	1099
Pan_troglo	1117	-----GATGCCTCTT-----	1126
Mus_muscul	1133	-----GAGCT--CTTTAAGATGGCG--	1150
Rattus_nor	1090	-----CCTGCCTGA-----	1098
Cavia_porc	1146	-----GAACCCCCAC-----	1155
Danio_reri	736	CTTATAATTTTATGTTTATTTATTTATTAATGTTAATTTGTTATTA	783
Oreochromi	1144	GCTCATTTCCTCCTGTGTGCACAGA GAAACTGTG-----	1178

cons	2929		2976
------	------	--	------

Homo_sapie	1100	-----	1099
Pan_troglo	1127	-----	1126
Mus_muscul	1151	---TGGGAGGGGCT-----TG-----AT	1165
Rattus_nor	1099	ATGGAGGGAGGTGCGAAGTGGCCAACGGCACTGAAGCCTGTGTGTGAG	1146
Cavia_porc	1156	-----	1155
Danio_reri	784	TGTCTGTTTGTTTTTTATAATGTTTATATTGATTTATTATGTTTATTT	831
Oreochromi	1179	-----	1178

cons	2977		3024
------	------	--	------

Homo_sapie	1100	-----CG-----ACTCCA--CA	1109
Pan_troglo	1127	-----GG-----GCTGGT--A	1135
Mus_muscul	1166	TAATAATA--GCCCTTCCCGAGAAC-GGGGTGGAATTCCTTCT--AA	1208
Rattus_nor	1147	-----TACCGCCCTGA--GGGGACCTG-T-----TGCTTT-TGTCA	1179
Cavia_porc	1156	-----TG-----CCTGC--CA	1164
Danio_reri	832	ATTTATTTATTTATTTATGTTTATTTATTTATCATCTTTATTTATTTAT	879
Oreochromi	1179	-----	1178

cons	3025		3072
------	------	--	------

Homo_sapie 1110 A-----TGGG-CCGCTCTGAT-T-----CTGAGGCGGAGG----- 1137
Pan_troglo 1136 G-----TGGTGCCT--CCTCT-TGGTGGGTGA-----TG----- 1161
Mus_muscul 1209 GTGGGGTTTCTAAGACCCCTCC-----TGG-----GT----- 1237
Rattus_nor 1180 G-----AGCA--GAGCCCTGCCTT-----CTGG-----GG----- 1203
Cavia_porc 1165 G-----CAGG-CCTCC--CTT-TCTCCCTGG-----GT----- 1189
Danio_reri 880 TATGTTTATTTATTGTGTTAATTTATTTATTTACTATGTTGTAT 927
Oreochromi 1179 -----CTGA-----GTTAAAC 1189

cons 3073  3120

Homo_sapie 1138 -----CCGGC----- 1142
Pan_troglo 1162 -----CCTCC--TCTGGGCACAGGTG 1180
Mus_muscul 1238 -----GCGG----- 1241
Rattus_nor 1204 -----ACAGAACACTGGG----- 1216
Cavia_porc 1190 -----CCTCCGCTCTG----- 1200
Danio_reri 928 TTATTTATCTTGCTTATTTATTTATTAATTATGTTTATTATGTTTATT 975
Oreochromi 1190 ATGTTTTGATCTATATATCTGTTTATGC----- 1217

cons 3121  3168

Homo_sapie 1143 -----GCTTTGTTGGCGGGCGGGGT 1162
Pan_troglo 1181 AT---GCC---TC-CTGGGTGGTTGATGCCCTCTGGGCTGG-----T 1215
Mus_muscul 1242 ----- 1241
Rattus_nor 1217 ----- 1216
Cavia_porc 1201 AAATAGGCACGATGACTGGCTGAGGGATG-----TGGG-----GGT 1236
Danio_reri 976 TATTTATTATGTTTATTATATTTGTTTATTTATTTATTATGTTTATTA 1023
Oreochromi 1218 ----- 1217

cons 3169  3216

Homo_sapie 1163 A-----GCC--GGC-----G 1170
Pan_troglo 1216 AGTGATGCC--TCCCTCT--GG----- 1232
Mus_muscul 1242 -----CGGGGGCTGCCCCCTGGA- 1258
Rattus_nor 1217 -----CTATTGTCTTCGGAAGACAGCCAGAGG 1244
Cavia_porc 1237 --GT--CGTCTCCACTGTGC----- 1252
Danio_reri 1024 TATTTATTTATTATGTATATTTATTTATTCATTTATTTTATTTATTTA 1071
Oreochromi 1218 ----- 1217

cons 3217  3264

Homo_sapie 1171 -----AG-----CAG-CT----- 1177
Pan_troglo 1233 -----CA-----CAG-GT----- 1239
Mus_muscul 1259 --GA-TGCTGCGAA-----CAG-GT----- 1275
Rattus_nor 1245 TTGAGTGCAAGTC--ACGTGCTGACTTTTATTGGACAAAGT----- 1282
Cavia_porc 1253 -----CAG-G----- 1256
Danio_reri 1072 TTAT 1119
Oreochromi 1218 -----ATTC-AA-----CAG-GTCTTAAATG 1236

cons 3265  3312

Homo_sapie 1178 -----GTCGCATTTTCCACAGGCGGG-AGCTGAG----- 1206
Pan_troglo 1240 -----GATGC-----CACCTTCTGG-G--TGGG----- 1259
Mus_muscul 1276 -----ATTG-----GG----- 1281
Rattus_nor 1283 -----C----- 1283
Cavia_porc 1257 -----GAGTCC-----TGCTGGGATCTGAGCTCTG 1281
Danio_reri 1120 ATATATATATATATATATATATACATACACACATATATATATATAT 1167
Oreochromi 1237 CTCTCTACCCACTGAGGC----- 1254

cons 3313  3360

Homo_sapie 1207 -----TG--TG-----GCCACCCCCCCTCC-----CCCCGTC 1231
Pan_troglo 1260 -----TG--AT-----GCCCTCCTCT---GGGTGCGTGATGCC---TC 1288
Mus_muscul 1282 -----TGTCGG-----AGTA----- 1291
Rattus_nor 1284 -----TG-----GCAATTA----- 1292
Cavia_porc 1282 CTGGCTG--TGGCTCAGCCACC---CCGGG-----AAGT-----TT 1312
Danio_reri 1168 ATATATATATATATATATATATATATATTTTCTATTTTTATTTATTTATT 1215
Oreochromi 1255 ----- 1254

cons 3361  3408

Homo_sapie 1232 CAGC-----TCTGCCCCCTTGCA-----GAACGGGTTT 1259
Pan_troglo 1289 CTGGGCTGGCGGCGA-----TGCC--TCCT-CTGGGCACAGGT-- 1323
Mus_muscul 1292 ----- 1291
Rattus_nor 1293 ----- 1292
Cavia_porc 1313 CTGAGCTG--CGTCT--G-----TGCCCTTC--AACTT-----GAGCTC 1345
Danio_reri 1216 TATTATGTTTATTTATTTATTTATTTATTTATTTATTTAATTATTA 1263
Oreochromi 1255 ----- 1254

cons 3409  3456

Homo_sapie 1260 GAACAGAGGCA-----A-----TCTCGGCGGCTGGATGGGGGGC 1293
Pan_troglo 1324 -----GATGCCA-----CCTCC-----TGGG---C 1340
Mus_muscul 1292 -----G-----GC----- 1294
Rattus_nor 1293 ----- 1292
Cavia_porc 1346 GCCCTGATG--AGAATACCGAGGAGGTGCCTGGGCC---CGGG---C 1384
Danio_reri 1264 TGATTATTATTTTATTATTTATTTATTTATTTGTTTATTATGTTT 1311
Oreochromi 1255 ----- 1254

cons 3457  3504

Homo_sapie 1294 -----CC-----TGCCCT---GCCAGA---CT 1309
Pan_troglo 1341 GGGTGATGCC-----TCCTCTGGGTGCGTGATGCCCT 1371
Mus_muscul 1295 GGGGCAGGTCCTCCGGGTGCGGCC----- 1317
Rattus_nor 1293 -----CTTAATCACCAGCAATTATGCC-----T 1315
Cavia_porc 1385 CGG---GCC-----TCCCCTC----- 1397
Danio_reri 1312 ATTAATTTTTTACTTATGTTAATTATTTATTTATTATGTTTCATTTA 1359
Oreochromi 1255 ----- 1254

cons 3505  3552

Homo_sapie	1310	-----CCTCAG-----TGA-GCC---TC-CAG-----	1326
Pan_troglo	1372	-----CCTCTGGGCACGGGTGATGCCACCTC-CTG-----	1400
Mus_muscul	1318	CCG-----CTGCC-CCAGGAGGCG-----GCCCTGGCGCGAC	1348
Rattus_nor	1316	CGTGTGGAGCTACTCTGGCCCCTGGAGGTTGGCACG-----CTCCCT	1357
Cavia_porc	1398	-----C-----	1398
Danio_reri	1360	TATATTCATATATTT-----	1375
Oreochromi	1255	-----ATGC-CTTA-----	1262

cons	3553		3600
------	------	--	------

Homo_sapie	1327	-----	1326
Pan_troglo	1401	-----	1400
Mus_muscul	1349	AATG-----	1352
Rattus_nor	1358	CGTG-----	1361
Cavia_porc	1399	-----	1398
Danio_reri	1376	-----	1375
Oreochromi	1263	-ATGGAGGAAGATGTGAAGCCACCCCAAACGGAAATGGTGAATGCAAG	1309

cons	3601		3648
------	------	---	------

Homo_sapie	1327	-----	1326
Pan_troglo	1401	-----	1400
Mus_muscul	1353	-----	1352
Rattus_nor	1362	-----	1361
Cavia_porc	1399	-----	1398
Danio_reri	1376	-----	1375
Oreochromi	1310	TAAGTAACAAGGAGTCTGAAAGCAACACATGAAGATGCTGCTGCGGGC	1357

cons	3649		3696
------	------	--	------

Homo_sapie	1327	-----	1326
Pan_troglo	1401	-----	1400
Mus_muscul	1353	-----	1352
Rattus_nor	1362	-----	1361
Cavia_porc	1399	-----	1398
Danio_reri	1376	-----	1375
Oreochromi	1358	AGTGAGGAAACACCATAGCTGTCTTTTTTGTGTGTTACTTGGAGCTTC	1405

cons	3697		3744
------	------	--	------

Homo_sapie	1327	-----G-	1327
Pan_troglo	1401	-----G-	1401
Mus_muscul	1353	-----GGCCGCTCTGAT-	1364
Rattus_nor	1362	-----GGCCC--TCAGGC	1372
Cavia_porc	1399	-----	1398
Danio_reri	1376	-----	1375
Oreochromi	1406	TATGGTTGTAGTAGTGGACTGTGGGGCAATCGTGGTA-----	1442

cons	3745		3792
------	------	---	------

Homo_sapie	1328	-----	GTGGGG	GGCAAC	C-----	1340
Pan_troglo	1402	-----	GTGGGT	-----	GATGCC	1413
Mus_muscul	1365	TCCCGGG	CCGGCGCTTTGTTGG	AGGGCGGGGTGG	-----	1398
Rattus_nor	1373	TCCCTGGG	-----	AATCCACG	GCAC	1391
Cavia_porc	1399	-----	-----	-----	-----	1398
Danio_reri	1376	-----	-----	-----	-----	1375
Oreochromi	1443	-----	-----	-----	-----	1442

cons	3793		3840
------	------	--	------

Homo_sapie	1341	-C- TT- TGGAGAGTAGCC	CACTTTGTC	-----	TCTGCT	--TTCCCCC	1378	
Pan_troglo	1414	TCC TTTGGGTGG	-----	TGAT	-----	ACCTCC TCTGGGTGAT	TGCCTCC	1451
Mus_muscul	1399	-----	-----	-----	-----	-----	1398	
Rattus_nor	1392	-----	-----	-----	-----	-----	1391	
Cavia_porc	1399	-----	-----	-----	-----	-----	CCTCC	1403
Danio_reri	1376	-----	-----	-----	-----	-----	1375	
Oreochromi	1443	-----	-----	-----	-----	-----	1442	

cons	3841		3888
------	------	--	------

Homo_sapie	1379	ACTGCGT	CCAGGCGG	-----	CACATC	-A	-----	1400	
Pan_troglo	1452	TCTGGGT	-----	GGTGA	-TAC	CCTCCTCTA	-----	1474	
Mus_muscul	1399	-----	-----	CGGGCT	-CC	-----	GCAG	CT	1417
Rattus_nor	1392	-----	-----	CCTAATTCCTGTTTAA	AAATA	CTTGAGAAACA	-----	GTCGC	1427
Cavia_porc	1404	CCTG	-----	GAGGCTAC	-----	AGACA	-----	1420	
Danio_reri	1376	-----	-----	-----	-----	-----	-----	1375	
Oreochromi	1443	-----	-----	-----	-----	-----	-----	1442	

cons	3889		3936
------	------	--	------

Homo_sapie	1401	-----	-----	-----	G	G	CCAC	-----	1406
Pan_troglo	1475	-----	-----	-----	G	G	CGGG	-----	1480
Mus_muscul	1418	TTTTTCC	CACGATCCGGGGAG	CTGAGTGTG	-----	G	CCAC	-----	1452
Rattus_nor	1428	TTTTTGGT	GATGAGACTGAAAG	-T-	CTGAG	CCC	CCGC	-----	1461
Cavia_porc	1421	-----	-----	-----	G	GAA	CGC	-----	1428
Danio_reri	1376	-----	-----	-----	-----	-----	-----	-----	1375
Oreochromi	1443	-----	-----	-----	-----	-----	CTTGAAAGTT	-----	1452

cons	3937		3984
------	------	--	------

Homo_sapie	1407	-----	-----	-----	C	-----	1407
Pan_troglo	1481	-----	-----	-----	T	-----	1481
Mus_muscul	1453	-----	-----	-----	C	-----	1453
Rattus_nor	1462	-----	-----	-----	C	-----	1462
Cavia_porc	1429	-----	-----	-----	T	CGAGCCCGGGCGGGC	1446
Danio_reri	1376	-----	-----	-----	-----	-----	1375
Oreochromi	1453	CTTTACGGGTGGGGAAGAAAAAGAGGCCACA	-----	-----	A	-----	1483

cons	3985		4032
------	------	--	------

Homo_sapie	1408	CCACCC	---	TGCTT	----	CAAG	----	CAGGACGTGTTCCC	TGCT	1440	
Pan_troglo	1482	GATGCC	---	TCCTC	TAGGCAC		----			1499	
Mus_muscul	1454		---	CCCTCCCT	----	C	----			1462	
Rattus_nor	1463		---	CCTTGTCA	----	C	----			1471	
Cavia_porc	1447	GCGCCC	---	TCA	----		---	TTCCAAC	----	TGCC	1466
Danio_reri	1376		----		----		----		----		1375
Oreochromi	1484		---	TATT	----		----		----		1487

cons	4033										4080
------	------	--	--	--	--	--	--	--	--	--	------

Homo_sapie	1441	GC	----	TCCCC	----	TTC	---	CCCCCAT	TCTGACTACA	1468
Pan_troglo	1500		----	A	----		----	GGTGAT	AC	1508
Mus_muscul	1463		----	CTGCGGTCCC	----		----			1473
Rattus_nor	1472		----	CTGAGATCCC	----		----			1483
Cavia_porc	1467	GAGGGCCCG	TCCCC	----		TTGACAA	CCCCCAT	----	GCT	1496
Danio_reri	1376		----		----		----		G	1376
Oreochromi	1488		----		----		----			1487

cons	4081										4128
------	------	--	--	--	--	--	--	--	--	--	------

Homo_sapie	1469	GAACTC	----		----		----		T	G	1476
Pan_troglo	1509	CTC	----		----		----		CT	G	1514
Mus_muscul	1474		----		----		----		T	CGT	1477
Rattus_nor	1484		---	T	----		----		CT	G	1487
Cavia_porc	1497		---	C	----		---	CTGCCCTCGCAGCCCGGC	CT	G	1518
Danio_reri	1377		----		----		----				1376
Oreochromi	1488		---	CCCCTTTTAATTCCAGCC	----		----			TTG	1510

cons	4129										4176
------	------	--	--	--	--	--	--	--	--	--	------

Homo_sapie	1477	GGCA	----		----		----				1480
Pan_troglo	1515	GGCA	----		----		----				1518
Mus_muscul	1478	ATCT	----		----		----				1481
Rattus_nor	1488	AGCA	----		----		----				1491
Cavia_porc	1519	GGCA	----		----		----				1522
Danio_reri	1377	TTTATTTATTATGTTTATTATTAGTAATGCTTTTTTAATTTATTATG									1424
Oreochromi	1511	AGCT	----		----		----				1514

cons	4177										4224
------	------	--	--	--	--	--	--	--	--	--	------

Homo_sapie	1481		----		----		----		G	1481	
Pan_troglo	1519		----		----		----		G	1519	
Mus_muscul	1482		----		----		----		T	1482	
Rattus_nor	1492		----		----		----		A	1492	
Cavia_porc	1523		----		----		----		G	1523	
Danio_reri	1425	TTTATTTATTATTCATTGTTTATTATTGTTTCT							G	TTTATTTATTT	1472
Oreochromi	1515		----		----		----		G	1515	

cons	4225										4272
------	------	--	--	--	--	--	--	--	--	--	------

Homo_sapie	1482	-----A-----	1482
Pan_troglo	1520	-----GTGATGCCA	1528
Mus_muscul	1483	-----GT-----	1484
Rattus_nor	1493	-----GA-----	1494
Cavia_porc	1524	-----GCG-----	1526
Danio_reri	1473	GTATGTTTTTTTTTTGTTTGTGTTGTTTGAATGAATGT	1513
Oreochromi	1516	-----T-----	1516

cons	4273		4320
------	------	---	------

Homo_sapie	1483	-----ATGTTGACGCCCCTTTGGT	1501
Pan_troglo	1529	CCTCCGGGTGGGTGATGCCTCTTCAAAGGAAATTGAC---TCTTC---	1570
Mus_muscul	1485	-----	1484
Rattus_nor	1495	-----	1494
Cavia_porc	1527	-----GCCTCCTCC	1536
Danio_reri	1514	-----	1513
Oreochromi	1517	-----	1516

cons	4321		4368
------	------	---	------

Homo_sapie	1502	TTCAT---GGAGGGGCTTCTGCGGACCC---G	1528
Pan_troglo	1571	---AAAATCGGACCCGCCTT-TGGGCTCTCTGTI	1600
Mus_muscul	1485	-----G	1485
Rattus_nor	1495	-----G	1495
Cavia_porc	1537	-----	1536
Danio_reri	1514	-----	1513
Oreochromi	1517	-----GTCTGTGCTCAGCAA	1531

cons	4369		4416
------	------	---	------

Homo_sapie	1529	-----	1528
Pan_troglo	1601	-----	1600
Mus_muscul	1486	-----	1485
Rattus_nor	1496	-----	1495
Cavia_porc	1537	-----	1536
Danio_reri	1514	-----	1513
Oreochromi	1532	CCAGAGGCCCTTAAGTTTCTCTGGGCTGCTGTGCTCCTGTACCCCTC	1579

cons	4417		4464
------	------	--	------

Homo_sapie	1529	-----TGC-----CCCAGC-----AACCCA	1543
Pan_troglo	1601	-----TGC-----CCCAGC-----TCCC	1613
Mus_muscul	1486	-----T-----	1486
Rattus_nor	1496	-----T-----	1496
Cavia_porc	1537	-----TCC-----CCAAACTGAAGCCA	1553
Danio_reri	1514	-----	1513
Oreochromi	1580	CGAGAGCTGCATTGCTCTCTTGCACACATTC	1611

cons	4465		4512
------	------	--	------

Homo_sapie	1544	TGATACTGAGCAG-AGTGC	GTCCGGGGTA	-----	GGG	----	1574	
Pan_troglo	1614	TCTTCCCGGCCTC-A	-----	GGCTGGGGCT	-----	GGG	----	1640
Mus_muscul	1487	---T---TGAACTG	-----	AGGCAAGGGTG	GAG	-----	1508	
Rattus_nor	1497	-----GCCCTA	-----	G-----	GTAGGAAATTGAG	-----	1516	
Cavia_porc	1554	--AT--TAAGCAG	GTCTGGGA	-----	GCA	-----	GTTTATT	1580
Danio_reri	1514	-----	-----	-----	-----	-----	1513	
Oreochromi	1612	TGAA	-----	-----	A	-----	1616	

cons 4513  4560

Homo_sapie	1575	-GGCGG	-----	-----	ACGAT	GCC	CCT	----	1590	
Pan_troglo	1641	-----GAAGAG	-----	-----	AAGGT	GGAA	AC	T	----	1657
Mus_muscul	1509	-----	-----	-----	G	CTTGTC	GG	----	1517	
Rattus_nor	1517	-----	-----	-----	T	ATTGCG	TGTGT	----	1528	
Cavia_porc	1581	GG--ACAAAG	-----	-----	CCG	ATTGTG	TCT	----	1600	
Danio_reri	1514	-----	-----	-----	-----	ATGG	-----	-----	1517	
Oreochromi	1617	-----	AGAAAAGACTTTAAAGGAGTGCAG	AAA	-----	-----	-----	-----	1643	

cons 4561  4608

Homo_sapie	1591	-----TGGC-TGGG-TG	-----	-----	CA	GGT	----	1605
Pan_troglo	1658	-----	-----	-----	CA	TGT	----	1662
Mus_muscul	1518	GGGGCTTT-GCTGGGC-A	-----	-----	CCT	----	1536	
Rattus_nor	1529	TCTGGTTTTT-GTTGGT-A	-----	-----	CTG	-G	----	1548
Cavia_porc	1601	-----TT-G-TGGGATG	-----	-----	CTAA	TGA	----	1617
Danio_reri	1518	-----	ACTAGTTTTAGTTAATGATGGTAA	-----	-----	-----	-----	1541
Oreochromi	1644	-----	-----	-----	-----	-----	-----	1643

cons 4609  4656

Homo_sapie	1606	CCCCGCC	-----	CCA	-----	GGGTAA	CCAGGG	----	1628
Pan_troglo	1663	TTTG--GC	-----	ACG	-----	GGGTG	TGGGG	----	1681
Mus_muscul	1537	TAATCCCC	-----	TCCC	ACTTTGGCT	GTGT	----	1561	
Rattus_nor	1549	TGT	-----	-----	TTTGGG	TTTTTTTT	TTG	----	1566
Cavia_porc	1618	A--TGCAC	-----	ACT	-----	AGCT	----	TTTT	1634
Danio_reri	1542	-----	CCCTGACCTTATTCTCTCTC	TCTCTCTTT	TTCTGTGTGTGT	-----	-----	1582	
Oreochromi	1644	-----	-----	-----	-----	-----	-----	1643	

cons 4657  4704

Homo_sapie	1629	CCTTCGGTGGTGGTGGTGGCGGG	-----	-----	TGAGA	-----	CT	----	GA	1659
Pan_troglo	1682	-----	TAATTAT	-----	TGAGT	-----	CT	----	GG	1697
Mus_muscul	1562	--GGT-----TAGAAGTTTGG	-----	-----	GAGAA	TTGCT	----	AA	1588	
Rattus_nor	1567	TTTGTTTGTTTGTGTTTGGT	TTTTTTTGT	AGACAA	TATCT	----	CA	1609		
Cavia_porc	1635	TTTTTTTTT--TTCTTTTTTGGG	-----	GGCC	-----	-----	-----	1658		
Danio_reri	1583	GTGTGTTT	TAGGTGAGGTGTGT	-----	GAGAA	-----	TGTTT	TA	1615	
Oreochromi	1644	-----	-----	-----	TGAAA	-----	-----	1648		

cons 4705  4752

Homo_sapie	1757	CCT	-----	GCGTGTGAGTACCAC	-CCCTGCGG	-----	1782	
Pan_troglo	1796	TC	-----	GTGCG	GAACCGCTCCCTCCTG	-----	1818	
Mus_muscul	1788	TC	-----	CGT	CCACCA	T-CAGGACTATAAAGG	1812	
Rattus_nor	1755		-----	GTACTG	-----	C-TGTCT-GGG	1769	
Cavia_porc	1766	TG	GATTAATGCTGTGTG	ATTA	A-TTATGCGT	-----	1795	
Danio_reri	1786		-----			TGTGT	1790	
Oreochromi	1799	CACACACACACACACACACACACACACACAAAAA					-----	1832

cons 5233  5280

Homo_sapie	1783		GACCTGTTGCTT	TGT	C-GAGG	-----	GCAGAGCC	-----	1810		
Pan_troglo	1819		CCT	GCCT	GT	GAGT	-----	GC	C	1834	
Mus_muscul	1813	AGTTA	-----	GGT	GCCC	AGA	-----	AC	CA	AGC	1834
Rattus_nor	1770	TGGTG	-----	GGT	GTA	AGT	-----	GC	TGGAGT	1791	
Cavia_porc	1796		G	GCTTC	C-CAGAA	T	-----	GC	GCAGCC	1816	
Danio_reri	1791		G	TGT	GTG	TTGTATTT	GT	-----	1808		
Oreochromi	1833			GC	C-CA	ACC	-----	GC	-----	1842	

cons 5281  5328

Homo_sapie	1811		CCT	GCCTTCTG	-----	CAGCCCG	CAGGGGA	C	AGA	1840	
Pan_troglo	1835		CAT	-----	-----	CAGCCGT	GGGGAAC	-----	TGT	1854	
Mus_muscul	1835	CTGACCTCT	CTCTTCTG	-----	-----	-----	AC	-----	CTTC	1857	
Rattus_nor	1792	CTGTCTTCT	GTCTTGGC	-----	-----	-----	AG	-----	CTGCA	1815	
Cavia_porc	1817			CCCTTCC	-----	CCGCCA	CA	-----	-----	1831	
Danio_reri	1809		C	TCTTCAT	CATAAT	AATCT	-----	CT	T	1830	
Oreochromi	1843		C	CCC	ACCTTCAT	-----	CAGCC	-----	CT	T	1864

cons 5329  5376

Homo_sapie	1841	ACACTA	GGCCA	TTGTC	TT	-----	CTGGAG	-----	1864			
Pan_troglo	1855	TCTGTT	GTGGCCG	ATGCCCTTC	-----	A	ACTTGAG	-----	T	1885		
Mus_muscul	1858		C	CCC	-----	AG	GCTTGAGATG	-----	CT	1875		
Rattus_nor	1816		G	CCCC	ACCT	C	TG	CACTGTGTTCCAGGGGT	1844			
Cavia_porc	1832			GTGGCCG	CTTGCC	G	TG	ACTTG	-----	T	1854	
Danio_reri	1831				CAT	GTGGTGTGT	TATGTG	-----	-----	T	1848	
Oreochromi	1865				T	-----	A	A	TGAA	-----	T	1872

cons 5377  5424

Homo_sapie	1865		A	TGGCC	CAG	AGTC	TGGGCACG	GTCACG	-----	TG	1893	
Pan_troglo	1886		C	CAT	CCCTG	A	TGAGAATA	ATG	-----	AG	1908	
Mus_muscul	1876	CC	CAG	-----	CC	AAG	TGGG	A	-----	C	1891	
Rattus_nor	1845	CCT	CAGCCT	CA	GG	CCATCAAC	TGTGCA	-----	-----	G	1872	
Cavia_porc	1855		G	CA	GG	CCA	GGC	TGAGAATC	CTGTTTTT	GTAGAGG	1888	
Danio_reri	1849		G	CA	GG	TCA	AACG	TGTG	A	-----	G	1866
Oreochromi	1873		G	CA	AGTCC	-----	CCC	TTCGC	-----	-----	1888	

cons 5425  5472

Homo_sapie	1894	CTGA	-C	----	TTTTATTG	-----	GACA	----	A	----	AGTC	-TGGC	--AA	1921
Pan_troglo	1909	--GA	-G	----	GTGT-TTG	-----	G	----	----	----	TGGC	-TGGA	--AA	1929
Mus_muscul	1892	CTG	-C	----	CTGAA-TG	-----	GAGG	----	G	----	AGG	-TGC	--AA	1916
Rattus_nor	1873	CTGG	-C	----	GTGAT-TT	-----	GGGG	----	A	----	----	-TGGG	--AA	1895
Cavia_porc	1889	CTGG	-G	----	GTGGGCTG	-----	GAGGGCC	ACC	GGGC	----	----	-TGCA	--AG	1921
Danio_reri	1867	GTGGAC	----	ATTAA	-TGAGTGTGT	-----	GAGG	----	A	----	ACCC	GTGCA	CTAA	1905
Oreochromi	1889	CCGG	-C	AAA	GTGA	-----	GAGG	----	A	----	CGC	GTCC	-----	1912

cons	5473	*			*			*			*			5520
------	------	---	--	--	---	--	--	---	--	--	---	--	--	------

Homo_sapie	1922	----	----	TTA	----	CTTAATCACCAGCAATTATGCTG	-----	----	----	----	----	----	----	1947
Pan_troglo	1930	AA	--	GAGTTC	----	CCT-TCGCCCC	-----	----	----	----	CAG	----	----	1951
Mus_muscul	1917	----	----	GTGGCCA	-A	-C-GG	----	CA	----	----	CTGAAGC	----	----	1936
Rattus_nor	1896	G	--	GAGTAGGCAGC	-C	-CAGGG	----	GAAGTCTGCTGGTGCTAGGGCT	----	----	----	----	1934	
Cavia_porc	1922	GTGG	GGAGTGCCCA	----	CTTCTGGGCCA	-----	----	----	----	----	CTG	----	----	1948
Danio_reri	1906	GGAG	GGAGTGTGT	----	----	G	----	AAAACCTG	----	----	CGCGGTGG	----	----	1934
Oreochromi	1913	----	AGTCCTAA	-AT	-CTT	-G	----	TTTTTCTG	----	----	----	----	CT	1936

cons	5521		*											5568
------	------	--	---	--	--	--	--	--	--	--	--	--	--	------

Homo_sapie	1948	----	----	CGTG	----	TGGAG	----	CTGG	--	1960
Pan_troglo	1952	----	----	----	----	GAG	----	CTACAG		1960
Mus_muscul	1937	----	C	TGTGTGTGA	-GTACCGCCC	CTG	-AG		1960	
Rattus_nor	1935	C	----	G	TGCCTTTCAACTTGAGCTC	CTC	-CC		1960	
Cavia_porc	1949	----	----	GGGA	----	TG	----	GTGCAG		1960
Danio_reri	1935	ATTTCA	GTGC	----	CGCTGCAA	-TC	CTGGAT		1960	
Oreochromi	1937	CTTTCA	TGGGCGACAGCTGGGG	----	CT	----			1960	

cons	5569						*			5600
------	------	--	--	--	--	--	---	--	--	------