

T-COFFEE, Version\_6.85 Tue Sep 9 14:03:25 WEST 2008

Cedric Notredame

CPU TIME:43 sec.

SCORE=16

\*

**BAD** **AVG** **GOOD**

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Canis\_fami : 15  
Homo\_sapie : 17  
Bos\_taurus : 18  
Mus\_muscul : 18  
Rattus\_nor : 16  
Gallus\_gal : 15  
Danio\_reri : 11  
cons : 16

```
Canis_fami 1 ----- 0
Homo_sapie 1 TCCATAAAGGGGTTGCGGGGGCCGCGCTCTCTTCTGGGAGGGCAGCGG 48
Bos_taurus 1 ----- 0
Mus_muscul 1 --AG-----C-----TGTGA 8
Rattus_nor 1 --G-----T-----AGC-- 5
Gallus_gal 1 ----- 0
Danio_reri 1 -----TT----- 2
cons 1 AGCGG CT AGCGG AGCGG 48
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Canis_fami 1 -----ATGCCCATTCGCTGCCAGCAGAG 23
Homo_sapie 49 CCAC--CGGCGAGGAACACGGCGCGATGCAGGTTCAGTGCCAGCAGAG 94
Bos_taurus 1 -----ATGTCTGTTCGCTGCCAGCAGAG 23
Mus_muscul 9 ACAC--AGGC-----GAGATGCCGATTTGTTGCCATCAGGT 42
Rattus_nor 6 -----GC----- 7
Gallus_gal 1 -----ATG-----CAGTGCTTCCCCCAG 17
Danio_reri 3 -CACTTTGGC-----AGCTGGG 18
cons 49 CCAC CGGC GAGGAACACGGC GCG ATGC AGGTT CAGT GCC AGC AGAG 96
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Canis_fami 24 CCCGGTGCTGGCAGGCAGCCGCCGCT-TTGGCG-GCCATGGGGGCA--- 66
Homo_sapie 95 CCCAGTGCTGGCAGGCAGCCGCCACT-TTGGTC-GCCCTTGGGGCA--- 137
Bos_taurus 24 TCCGGTGCTTGCAGGCAGTGCCACT-TTGGCC-GCCCTGGGGGCA--- 66
Mus_muscul 43 CCCGGTGCTGGCAGGTAGCGCCACA-TTGGCC-ACCATGGGGACC--- 85
Rattus_nor 8 -----CACA-TTGGCC-ACTATGGGGACC--- 29
Gallus_gal 18 CCTGGTGCTGGCGCTCAGCTC-GCTGCTGGGC-GCC----- 51
Danio_reri 19 CT-----TTTGTAGTCGGTGG-A-TTGCTTTACC-TTCTGAAACAA 56
cons 97 CCCGGTGCTGGCAGGCAGCCGCCGCT TTGGCG GCCATGGGGGCA ** * 144
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Canis_fami 67 CTGTTCTGTACCTGGCCAAGCCCTCG----- 93
Homo_sapie 138 CTGGCCTTGTACGTCGCGAAGC-CTC-----C 163
Bos_taurus 67 CTGGTCTGTACCTCGCGGAGCCCT-----CC 93
Mus_muscul 86 CTGATCCTGTGCTTTGGGAAACCCG-----CC 112
Rattus_nor 30 CTGATCCTGTGCTTAGGGAAACCTG-----CC 56
Gallus_gal 52 CTGGCGCTG---CTG---CAGCTCTCGCTCTACCTGCGCGTGCCGTCC 93
Danio_reri 57 CTGACCA-----CGCAA-----C----- 70
cons 145 CCCGGTGCTGGCAGGCAGCCGCCGCT TTGGCG GCCATGGGGGCA ** * 192
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Canis_fami	666	- CCTGGA ----- CAGCTCCCGGGA CGCAGG ----- CG	692
Homo_sapie	576	- CCAGGACCTCATCCG C TCTCAGCAG ----- CTCCA	605
Bos_taurus	491	- CCTGCG ----- C TCTCCACGG ----- CTCCG	511
Mus_muscul	487	T CCTGGG ----- C GCCCCTCGG ----- AT	505
Rattus_nor	428	C CCTGGG ----- C GCCCCTCAG ----- AT	446
Gallus_gal	443	- CCGGG ----- CGAAGTTTGGAACGAAACG	467
Danio_reri	420	- TCTAG ----- AT	426

cons	913		960
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Canis_fami	693	AGGAAG ----- AGTCGCGGTG -- CTGCGCGGCCCA	720
Homo_sapie	606	A ----- ATCCTCTGG -- CTG -----	618
Bos_taurus	512	AGC -- G ----- C -- TTCTCAGGT -- CT	527
Mus_muscul	506	----- G ----- C -- TCCA -- GTA GCTG	518
Rattus_nor	447	----- ----- A -- TCCA -- GGTG GCTG	459
Gallus_gal	468	A -- AAG ----- CAAAC ----- GT -- TACGCA	484
Danio_reri	427	----- GGTCAATTTTAAAAGC ----- AG -----	444

cons	961		1008
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Canis_fami	721	AACGGT -- CTTC CGAGTTAG -- G ----- A -----	740
Homo_sapie	619	----- CTC ----- GAGAGA ----- A -----	628
Bos_taurus	528	----- GCTT ----- C ----- G ----- A -----	534
Mus_muscul	519	----- ----- C ----- GAGGATGGGTGGATGA	535
Rattus_nor	460	----- ----- C ----- AAGGGTGGGTGGGTGA	476
Gallus_gal	485	A -- AGGAGCGTG ----- C -- G ----- A -----	497
Danio_reri	445	----- ----- ----- ----- ATTTTAAAGT	454

cons	1009		1056
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Canis_fami	741	----- ----- A -- TCCC -- AGAAT TGGGGGC GATTT	762
Homo_sapie	629	----- ----- AGAGGTCC ----- TGCGGGC -----	643
Bos_taurus	535	----- ----- A -- TCCTTT -----	541
Mus_muscul	536	----- ----- ----- -----	535
Rattus_nor	477	----- ----- ----- -----	476
Gallus_gal	498	----- ----- A -- GCGCTCGG -- TGCGGGC -----	513
Danio_reri	455	TAACAATATTACATCATAAAA A -- TA -----	477

cons	1057		1104
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Canis_fami	763	TGCCTCCTGGTCTATAAGGAGA -- GCTTGGAGAAGGCC TGC GGACCCCG	809
Homo_sapie	644	----- ----- GGGAGGCG ----- A -- CCTGGAAA -----	660
Bos_taurus	542	- GACTT ----- CGCTGGGGGAAGAGC ----- GGGGC -----	566
Mus_muscul	536	----- ----- A -- GC -- TGGAGAA ----- C -----	546
Rattus_nor	477	----- ----- T -- GC -- TGGGGAA ----- C -----	487
Gallus_gal	514	----- ----- GGGACGCGCGTGGGGACG -----	531
Danio_reri	478	----- ----- GCTTTTA -- AAT -----	487

cons	1105		1152
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Canis_fami	810	GGGGCGGGGAGGGGGA	GCCCCGAGCAAGGTGCC	GG--C--	GC	GAC	852
Homo_sapie	661	-----	GCTC-----	AG--GTT	GGGGAG	-----	675
Bos_taurus	567	-GGGAG-----	GCGACT-----	-----	GGAAAG	-----	583
Mus_muscul	547	-----	TC-----	AGTTT	GGGCAG	-----	559
Rattus_nor	488	-----	TC-----	AGTTC	GGGTAG	-----	500
Gallus_gal	532	-----	GCCC-----	CG--C	GGGGAG	-----	544
Danio_reri	488	-----	TA-C-----	ATTTT	ATGAAT	-----	502

cons 1153     \* 1200

Canis_fami	853	-----	AC-----	T--CCT	-----	-----	858
Homo_sapie	676	-----	AC-----	-----	CTATTGGA	-----	685
Bos_taurus	584	-----	-----	-----	CT-----	-----	585
Mus_muscul	560	-----	ATGCCATCG	GCCAGGGT	CCT	-----	579
Rattus_nor	501	-----	GAGTTATTG	GCCAGGGT	CCT	-----	520
Gallus_gal	545	-----	AA-----	GGCCG	CCGCG	-----	557
Danio_reri	503	ATTTGAGACATTTTGA	-----	-----	-----	-----	518

cons 1201     1248

Canis_fami	859	-----	TCCCTCTC	CGTGGTC	CCCAG	CGGC	882	
Homo_sapie	686	CAGGACTG	TTCCT	TA	ACTGCG	CGCAGGCGG	CGGT	719
Bos_taurus	586	-----	G-----	T-----	TGG	CCCAG	CGGT	599
Mus_muscul	580	-----	TCAATCTC	-----	CA	-----	589	
Rattus_nor	521	-----	TCCCTCTC	-----	CA	-----	530	
Gallus_gal	558	-----	G-----	TCCCTCT	GG	CCCAG	C	573
Danio_reri	519	-----	-----	-----	AG	CGGT	TCAAACG	531

cons 1249     \*  1296

Canis_fami	883	-CAC-TGTC-CCCTT-GCGA-G	-----	C	900	
Homo_sapie	720	-TACCTGTG-GCATATCGCGC	CCC	-----	GCC	744
Bos_taurus	600	-AACCTCTC-CGATTCCGCGC	-G	-----	A	620
Mus_muscul	590	--AC-TGTGCGCCTT-GC	-----	TCTGTCT	CATAGACC	618
Rattus_nor	531	--AC-TGTGCGCCTT-GCAA	-GTGCCTGCT	TCTGTCC	-CTAGACC	568
Gallus_gal	574	---CGGC-ACC--GC-A	-G	-----	C	585
Danio_reri	532	TAAA-TATT-ACATT-AAAA	-G	-----	A	550

cons 1297     1344

Canis_fami	901	---TCC-GCGTTT-----	GGC	-----	G	913
Homo_sapie	745	CCGCTTC-CCTTTCTTCCCT	CACCTTTTCCTTGCAGG	GTGGGGACAG	-----	790
Bos_taurus	621	---TCC-CGTGT-----	CACCT	-----	G	634
Mus_muscul	619	---TCA-CCTTT-----	-----	-----	-----	626
Rattus_nor	569	---TCA-CCTTT-----	-----	-----	-----	576
Gallus_gal	586	---GGC-GGTTT-----	C	-----	-----	594
Danio_reri	551	---ATCAG-GT-TCATGTTAAA	-----	-----	-----	567

cons 1345   \* \*    1392

Canis\_fami 914 ----- 913  
 Homo\_sapie 791 ATTAGTTC----- 798  
 Bos\_taurus 635 ----- 634  
 Mus\_muscul 627 -----CTCTGATAATGCCAGGTCCAGTTGGTTCAGGGACTCG----- 663  
 Rattus\_nor 577 -----CTGGTATAATGCCAGGTCCGGTTGGTTCAGGGACTTGGGGA 617  
 Gallus\_gal 595 ----- 594  
 Danio\_reri 568 ----- 567

cons 1393  1440

Canis\_fami 914 -----TGCCCGCTTGCG-----A----- 926  
 Homo\_sapie 799 -----TGGGATCTTGGGAGAGTCTTACGCGTTTGGCATCTC 834  
 Bos\_taurus 635 -----TGCGCTCTTGCC-----C----- 647  
 Mus\_muscul 664 ----- 663  
 Rattus\_nor 618 GGTGATACGCTCTGG-----TCCC-----G----- 632  
 Gallus\_gal 595 ----- 599  
 Danio\_reri 568 ----- 567

cons 1441  1488

Canis\_fami 927 -----GACCCA-----GA-----AGCCGGGGC-----TG-- 945  
 Homo\_sapie 835 CCGAGGGGAAGCT-----C-----AG-----C-----T-----CAGAGGTTCT-----C-- 862  
 Bos\_taurus 648 -----ATCT-----C-----CCC-----TTC-----T-----CATTCCTTCTTC-- 671  
 Mus\_muscul 664 ----- 663  
 Rattus\_nor 633 -----AACT-----TTGAGA-----AGTTCTTCTTG 652  
 Gallus\_gal 600 -----GTCCGTG-----AGA-----TTC-----GGTGC GTGCGTACATC-- 628  
 Danio\_reri 568 -----ACT-----GT TAAAAATTC-----G-----TTAATA-- 588

cons 1489  1536

Canis\_fami 946 -----AGCGGGGCGAGGGGCTT-----CCTG-----GAGACG-----ATGCAG-- 978  
 Homo\_sapie 863 -----A-----TT----- 865  
 Bos\_taurus 672 -----AC-----CT-----TTT-----C-----TTT-----ACAGG-----GTGCGGGG 695  
 Mus\_muscul 664 ----- 663  
 Rattus\_nor 653 AACAGTTTGGC-----CT-----TT-----GTGT----- 671  
 Gallus\_gal 629 -----AGAT-----ATT-----C-----CGTCGTACGTATGCCG-- 652  
 Danio\_reri 589 -----AT-----CT-----TTAATC-----AA----- 600

cons 1537  1584

Canis\_fami 979 -----C-----C-----GGCGCCC-----C-----G----- 989  
 Homo\_sapie 866 -----GATT-----TAGTCTTTGTCAG-----GTCTAAGGAGGAAGGTGGGTAGAGCC 907  
 Bos\_taurus 696 CCGCTGGTT-----TTG-----AG-----GTCTT-----G-----AGGGAGCC 723  
 Mus\_muscul 664 ----- 663  
 Rattus\_nor 672 -----G-----ACTGAGGAAGGAAGTGGGCAGAGTC 697  
 Gallus\_gal 653 -----GTG-----AG-----TGCC-----G-----G----- 663  
 Danio\_reri 601 -----G-----GT----- 603

cons 1585  1632

Canis_fami	990	CG	-----	A	-----	GG	-----	TT	996
Homo_sapie	908	CA	-----	AATCCAGAC	CTTCACAGAT				927
Bos_taurus	724	CA	-----	A	-----	GT	-----	AT	730
Mus_muscul	664		-----		-----		-----		663
Rattus_nor	698	CACCTCCC	CATCCATAGATGAGAACAGGATAA			GA	-----	T	731
Gallus_gal	664	CA	-----	A	-----	GC	-----	TT	670
Danio_reri	604	CA	-----	A	-----	GT	-----	T	609

cons 1633  1680

Canis_fami	997	GGGTCTC	CCCCGGG	-----	G	CTCTCCGC	CGCGCA	---	1025
Homo_sapie	928	GGGGAA	-----	G	-----	AGAAATAT	AG	TGA	946
Bos_taurus	731	TGGCAT	-----	G	-----	T	-----	AGCTCA	744
Mus_muscul	664	-GGGAG	-----	G	TGATAA	A	CTCTGG	-----	AACT
Rattus_nor	732	GGGGAT	-----	TCTGC	TTAGAAACGA	-----	CCCTAAAGA	AAGCTGAGGT	770
Gallus_gal	671	TGTTCTC	-----	G	-----	A	CATTAAAG	AGCGCA	693
Danio_reri	610	TG	-----		-----	A	CTTTAAAT	TGTTTCATAT	629

cons 1681  1728

Canis_fami	1026	---	GG	ACGTTCC	CTCCGCGT	TACGCAGAC	---	A	A	G	CCCCGC	1060		
Homo_sapie	947	---	GA	T	CCCCTG	---	ACT	CAAGC	---	G	AGGGT	CCCCGC	976	
Bos_taurus	745	---	GA	G	---	GCTCTGGAT	---	CAACT	---	T	A	T	CTCGGC	770
Mus_muscul	687	CTCAGA	AGTTCT	TCTGAT	-----	CAGTTT	---	G	GT	---	CTTTGT	719		
Rattus_nor	771	CACCGAC	CAATTACC	CTTCC	-----	CAACTC	CTTCAG	GA	---	CTTTGA	809			
Gallus_gal	694	---	GC	CGCGACC	CTCCGC	CGGTGG	CAGAT	---	A	---	G	CGC	724	
Danio_reri	630	T	---	---	---	CAGTT	---	T	---	TTG	---	CTTTGC	646	

cons 1729  1776


Canis_fami	1061	---	---	GCGA	---	GA	AGACTC	CACGA	CGGGGAA	GT	TGCC	AAC	1093	
Homo_sapie	977	---	---	T	TCT	TAGGCC	CCTCC	CAAA	AGG	GAC	---	CAA	G	1005
Bos_taurus	771	---	---	AGGGA	---	GA	---	---	TGGGCA	G	---	A	785	
Mus_muscul	720	---	GTGA	---	---	CT	---	---	GAGGAAG	---	---	---	732	
Rattus_nor	810	---	GTC	AGGAAA	AG	---	CT	---	GAGCAAG	---	---	---	829	
Gallus_gal	725	---	---	---	---	---	---	---	T	---	---	---	725	
Danio_reri	647	TTTTT	G	---	T	TAATAT	TTTTTGTATTAT	---	GGTA	---	TA	---	676	


cons 1777  1824


Canis_fami	1094	CA	-----	AACCA	AGAACGAC	---	CAGACGCAC	---	GGCCTT	---	ATTTT	1128		
Homo_sapie	1006	CA	CACCACCA	ATT	CATCTACCTTTC	---	CAATTTCC	CTGG	ACTT	TGAA	---	A	1051	
Bos_taurus	786	---	---	GC	-----	---	CAAA	---	---	CTT	AA	---	A	797
Mus_muscul	733	---	---	G	-----	---	AAGCG	---	---	---	---	---	738	
Rattus_nor	830	---	---	CCC	---	---	T	CAAGCG	CTC	---	TA	---	844	
Gallus_gal	726	---	---	---	---	---	T	CAGG	---	---	---	---	730	
Danio_reri	677	---	---	---	---	---	---	AATAA	CTATAG	TTATACT	TGTTA	698		

cons 1825  1872



Canis_fami	1129	T--GA-----AT-----TGAGAAATTCTAGGGTCAAAGATC-A---	1158
Homo_sapie	1052	TGTGA-----GT-----GGGTAACT-----TACAG-----CT-	1073
Bos_taurus	798	T--GA-----TGGA-----AGAGA-ATG-	814
Mus_muscul	739	-----TGA-----AATTCTGAGTT-	740
Rattus_nor	845	-----GA-----TGAAAA-----AATTCTGAGTT-	864
Gallus_gal	731	G--C-----GC-----T-----CAGCGCGG-C-G-	745
Danio_reri	699	T--GATTATACAAATAAAATAAAAT-----CAATTATT-ATT	733
cons	1873		1920

Canis_fami	1159	--AG----GAAGTCTAGATTGGAA-A--TTAG-GG-TAA-----A-	1187
Homo_sapie	1074	-CAAATGTTC-TTCTAGATTTAAA-AAATCCG-GGTTTCAGG-----A-	1111
Bos_taurus	815	-CAAT-GGGAACCCCG-----GG-C--CTG-----A-	836
Mus_muscul	741	-CAGA-GTCCA-CCTCC-----CA-T--CTAT-AG-A--GGAGA-----	769
Rattus_nor	865	-CAGA-ATTTTGCCTTT-----CT-G--GTGTGG-A--GGAAAAGAC	899
Gallus_gal	746	-CAC-----ACAGCCCCG-----CG-G--TTGC-CG-T-----C-	768
Danio_reri	734	TATT--ATTA-TCATT-----ATTA--TTAG-AG-A--TTAAT--AT	765
cons	1921		1968

Canis_fami	1188	-GA-A-----	1190
Homo_sapie	1112	-GAAC-TTTGC	1120
Bos_taurus	837	-GGAA-----	840
Mus_muscul	770	-----A	770
Rattus_nor	900	AGGAAAGTGAT	910
Gallus_gal	769	-GG-----	770
Danio_reri	766	AGTA-----T	770
cons	1969		1979