

FLOWER 1 ATGGCGGGAGAAAATTCCGATAACGAGCCGTCTTCACC-----
 SOY 1 A-----
 FLY 1 CT-----TTAAACT-----CG-----
 CELEGANS 1 AT-----
 FROG 1 -----
 TROUT 1 -----
 DANIO 1 A-----AAA ACT-----AGTCTACAGTC-----
 MOUSE 1 G-----T-----GTTT-----
 RAT 1 A-----T-----GGTCCCACCCTGCTCCTGCTGCTTGGCCTCC
 HOMO 1 -----
 PIG 1 -----
 COW 1 -----
 1 1.....10.....20.....30.....40.....50.....

FLOWER 39 ---AGCTTCACCTTCTTCCGCTGGATT-----
 SOY 2 -----
 FLY 12 -----GTGATATTTTATTGACACAA
 CELEGANS 3 -----
 FROG 1 -----
 TROUT 1 -----
 DANIO 19 ---GAGCTTCTGT-----
 MOUSE 7 -----
 RAT 35 TGGTGCTTCAGTGTCCCCCTCTGGAATGGCACCGAGACCAGTATTCTCTTGCTGAGGCCA
 HOMO 1 -----
 PIG 1 -----
 COW 1 -----
 61 61.....70.....80.....90.....100.....110.....

FLOWER 63 -----CAACACAGA-----
 SOY 2 -----
 FLY 32 GGAAAGTTGTTACAGTCGGGTGTTCTTATAAACATGTATGCAGAAGCGGGTGTCCACTGT
 CELEGANS 3 -----GGCTGATCGTGCTAACAAACGATGACGACG-----
 FROG 1 -----
 TROUT 1 -----
 DANIO 29 -----TCAAGGCAGACG--TG-----
 MOUSE 7 -----GCGC-----G
 RAT 95 TGACACTCCACCCAGACG--TGGGCGCACGAGCTCGCAT--AGTATCAGGAATGCTCCGG
 HOMO 1 -----
 PIG 1 -----
 COW 1 -----
 121 121.....130.....140.....150.....160.....170.....

FLOWER 72 -----TCAGTTACCAATCAGTACAAGC-----
 SOY 2 -----
 FLY 92 ATGACC---CAGACGTTAACAGCACTGCTTA-----TCGGAACTAG-----
 CELEGANS 32 -----
 FROG 1 -----
 TROUT 1 -----
 DANIO 43 -----
 MOUSE 12 AAAAC-----CGGTGGCAGCTGGTGC-----
 RAT 151 AAAACTTCTCAGAGGAAAAGGTCATGGCTTGGTGACTTGTCTGTGGTAGGAGTGGCAAGG
 HOMO 1 -----
 PIG 1 -----
 COW 1 -----
 181 181.....190.....200.....210.....220.....230.....

FLOWER 94 -----CAAAC-----
 SOY 2 -----
 FLY 130 ACCGCAGCCCTGAGTTGGCTCGAT----TAGCAAACAT-----TTTCCCGCGCA
 CELEGANS 32 -----TCGAT----CGCCAGCCAC-----TTCC-----
 FROG 1 -----
 TROUT 1 -----
 DANIO 43 -----
 MOUSE 33 -----
 RAT 211 AGCTCACCCCTAAAGCGTTTCGGGAAGCGCACTGAGCACGCTCTGCCTTTGCCCCGCGTC
 HOMO 1 -----
 PIG 1 -----
 COW 1 -----
 241 241.....250.....260.....270.....280.....290.....

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FLOWER 100 -----TCCGAAAATTTCTCCGATG-----
SOY 2 -----
FLY 175 TTTTCGC-----ACGCGTCGTCACA-----A
CELEGANS 51 -----
FROG 1 -----
TROUT 1 -----
DANIO 43 -----
MOUSE 33 -----GGTGGAGC-----
RAT 271 TTCCTGCGGTCAGCTCCGGTCCTTCGACCGGTCGCCCAATGTCTCCGAGGGTGGAGCCTA
HOMO 1 -----
PIG 1 -----
COW 1 -----
301 301.....310.....320.....330.....340.....350.....

FLOWER 119 -----
SOY 2 -----
FLY 196 CAAGATCGGCGGTACAAAACA-----
CELEGANS 51 ---GATCG-----
FROG 1 -----GTGAGGA-----
TROUT 1 -----
DANIO 43 -----
MOUSE 41 -----
RAT 331 AGGGACCGGCGCCTCATATTAGTGACCTCTCTGGTCACCTGGACCAGGGAGGAAGGAAGG
HOMO 1 -----
PIG 1 -----
COW 1 -----
361 361.....370.....380.....390.....400.....410.....

FLOWER 119 -----
SOY 2 -----
FLY 217 -----AAACATATTACAGATAAAC-----
CELEGANS 56 -----
FROG 8 -----
TROUT 1 -----
DANIO 43 -----
MOUSE 41 -----
RAT 391 GAGCGCATCCCTTCCACGGACGCCGTTCTATATGGAATTATTCATACTGTATATACAGCA
HOMO 1 -----
PIG 1 -----
COW 1 -----
421 421.....430.....440.....450.....460.....470.....

FLOWER 119 -----AAGAA-----GAA
SOY 2 -----AA
FLY 236 -----GCTAAGCAC-----AACAGAC
CELEGANS 56 -----
FROG 8 -----GAGAACAGAA
TROUT 1 -----
DANIO 43 -----
MOUSE 41 -----TAGCGCAGA-----
RAT 451 GAAGTCCACACTGCCCTGTGGCTGAGAACCAGATGCCTAGGACTGTTACTAGAACAGAA
HOMO 1 -----
PIG 1 -----
COW 1 -----
481 481.....490.....500.....510.....520.....530.....

FLOWER 127 GCAGC-----TG TAGATACCCA-----
SOY 4 GCA-----
FLY 252 GCA-----CGTAATGGACAATCCCAGTTCACCACCGCCAAATACGCCAGC-----
CELEGANS 56 -----CCGAC-----
FROG 18 GCAGC-----
TROUT 1 -----
DANIO 43 -----
MOUSE 50 -----
RAT 511 GCAGCCCTCTCCCTGGAAGTATCCAGCCCTGTCTCTGCCCACTTGGCCAGGCCCGGGTCT
HOMO 1 -----
PIG 1 -----
COW 1 -----
541 541.....550.....560.....570.....580.....590.....

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FLOWER 144 -----
SOY 7 -----
FLY 298 -----GATGCCGCC-----GAACGCCGCGATCTGCGGG
CELEGANS 61 -----GATGCGGAT-----G-----
FROG 23 -----ATGCGCG-
TROUT 1 -----
DANIO 43 -----AGAAAATGGCG-----
MOUSE 50 -----CATGCGCG-
RAT 571 CCACGCACTTTTGGTGGTGAAGATGCAGGAAATGGA ACTCAGAATCTCGCGCATGTAGGG
HOMO 1 -----AATTCCGCG-----
PIG 1 -----
COW 1 -----
601 601.....610.....620.....630.....640.....650.....

FLOWER 144 -----AGTCATTAGAG-----
SOY 7 -----
FLY 326 CA-----
CELEGANS 71 -----
FROG 30 -----ATTCTTCAGAGTCATTTAATATTGCAACAAGTCC-----
TROUT 1 -----
DANIO 54 -----GATTCTCAGAGTCGTTCAACATGGC-----
MOUSE 58 -----AGTCTTCTGAGTCTCTCTC-----AGCATCTAGCCCTGCCCGTCAG
RAT 631 AAAGCAGGTACCACGAGTCTTCTGAGTCTTCTCGGCAGCATCTAGCCCTGCCCTCAG
HOMO 10 -----GAATCATCGGAATCTTACCATGGCATCCAGCCCGGCC---CAG
PIG 1 -----
COW 1 -----
661 661.....670.....680.....690.....700.....710.....

FLOWER 155 -----
SOY 7 -----
FLY 328 -----
CELEGANS 71 -----
FROG 64 -----AAGGGCAGGGTCCCGCGTGATG--
TROUT 1 -----GGCTC-----
DANIO 80 -----CACCAGCCCCACTCGAGGCTCTCGGCGGGGGGAT
MOUSE 99 CGGCGCCGGATCAGTGATCCCCTCACCTCCAGCCAGGCCGAGCTCCAGACGTGCTGAC
RAT 691 CGGCGACGGATCAGTGATCCCCTCACTTCCAGCCAGGCCGAGCTCCAGACGTGCTGAC
HOMO 52 CGTCCGCGAGGCAATGATCCTCTCACCTCCAGCCCTGGCCGAAGCTCCCGCGGTACTGAT
PIG 1 -----
COW 1 -----
721 721.....730.....740.....750.....760.....770.....

FLOWER 155 -----ATGAGCC-----TGACGAAGCG-----
SOY 7 -----
FLY 328 GCAATGACGTCGCCGTTGGCGACTTTGAGCCGTTTCGAGAAC--GAGGACGAGATCCTGG
CELEGANS 71 ---ATGACGTTGAC---GGCATCGATGAGATGTTCAACAAC--GAGGACGAG-----
FROG 87 -CCTTGACTTCCAGCCCTGGCC----GTGACCTTCCACCATTTGAGGATGAATCGGAGG
TROUT 6 -----
DANIO 114 ---CTGACCTCCAGCCCTGGCA----GAGACCTTCCCTCATTGAGGATGAGTCTGAGG
MOUSE 159 GCCCTGACCTCCAGCCCTGGCA----GAGACCTCCCCCATTGAGGATGAGTCTGAGG
RAT 751 GCTCTTACCTCCAGCCCTGGCA----GAGACCTCCCCCATTGAGGATGAGTCCGAGG
HOMO 112 GCCCTCACCTCCAGCCCTGGCC----GTGACCTTCCACCATTTGAGGATGAGTCCGAGG
PIG 1 -----
COW 1 -----
781 781.....790.....800.....810.....820.....830.....

FLOWER 172 -----GAGGATGAAGAAGAAGAAGGAGAAGATCTCT
SOY 7 -----
FLY 386 GA-----GATCAGACCG-TTCGCGATGAGGCCGAGGAGGATGGCGAGGAGCTGT
CELEGANS 115 -----
FROG 141 GTATGTTTGGAGATGGAGTGGTTCCAGAGGAG---GAAGAA---GATGGAGAGGAACTGA
TROUT 6 -----
DANIO 166 GACT-TCTGGGAGACACTCTT--CCTGATGAG---GAGGACGATGATGGAGAGGAGCTGA
MOUSE 214 GGCT-TCTGGGCACAGAGGGG--CCCATGGAG---GAAGAAGAGGATGGAGAGGAACTCA
RAT 806 GGCT-GCTGGGCACGAGGGG--CCTGTGGAG---GAAGAAGAGGATGGAGAGGAACTCA
HOMO 167 GGCT-CCTAGGCACAGAGGGG--CCCCTGGAG---GAAGAAGAGGATGGAGAGGAGCTCA
PIG 1 -----
COW 1 -----
841 841.....850.....860.....870.....880.....890.....

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FLOWER	206	TCAATGATACTTTTATGAACGATTATCGGAAGATGGATGAGAATGATCAGTATGAGTCTA
SOY	7	-----
FLY	437	TCGGGGACAACATGGAGAACGATTACCGGCCCATGCCTGAGCTGGATCACTACGATCCGG
CELEGANS	115	-----GATCC--
FROG	195	TAGGAGATGCCATGGAAAGGGATTACCGCCCTATATCTGAGCTGGATAGGTATGAGGTGG
TROUT	6	-----
DANIO	220	TTGGAGACGCCATGGAGAGAGACTACCGTGTAATCCCAGAGCTGGACCGCTATGAAGCGG
MOUSE	268	TTGGTGATGGCATGGAGAGAGACTACCGTCCCATTCCGGAGCTCGATGTCTACGAGGCCG
RAT	860	TTGGTGATGGCATGGAGAGAGACTACCGTCCCATTCCGGAGCTCGATGTCTACGAGGCAG
HOMO	221	TTGGAGATGGCATGGAAAGGGACTACCGCGCCATCCCAGAGCTGGACGCCTATGAGGCCG
PIG	1	-----
COW	1	-----
	901	901.....910.....920.....930.....940.....950.....
FLOWER	266	ATGGAATAGATGATTCCGTCGATGATGAAA-----GAGATTTAGGTCAGGCTATGCT
SOY	7	-----
FLY	497	CGCTGCTGGA-----CGACGAGGATGA-----CTTCTCGGAGATG-----
CELEGANS	120	-----AGAGGATGAGGAGGGCGAGAATCTTTTCGGAGATGATATGG
FROG	255	AAGGGTTGGA-----T---GACGAAGAGGATGTTGAAGATCTGACTGCCAGCCAGCGGG
TROUT	6	-----
DANIO	280	AGGGTCTGGA-----T---GAGGATGAAGATCTGAGTGAACTTTCACCCAGCGCTCGTG
MOUSE	328	AGGGATTGGC-----CCTGGATGATGAAGATGTGGAGGAGCTGACAGCCAGTCAGAGAG
RAT	920	AGGGATTGGC-----CCTGGATGATGAAGATGTGGAGGAGCTGACAGCCAGTCAGAGGG
HOMO	281	AGGGACTGGC-----TCTGGATGATGAGGACGTAGAGGAGCTGACGGCCAGTCGAAGGG
PIG	1	-----
COW	1	-----
	961	961.....970.....980.....990.....1000.....1010.....
FLOWER	318	TGACCGTCGTGCTGC---TGACGCTG-----ATCTTGATGCTCGT---
SOY	7	-----
FLY	532	-----
CELEGANS	161	AG-----AGGGACTACCGTGAG-CAGCCGGAGCTCGATCAGTACTCCGAATCTGG----A
FROG	306	AGGCAGCAGAGCAGTCCATGAGAATGCGAGACAGGGAGATGGGACGTGAGCTTGGCCGTA
TROUT	6	-----
DANIO	331	CCGAGGCAGAAGCGGCGATGAGGAGACGCGAC-----AGAGAACAAGGC----
MOUSE	382	AGGCAGCTGAGCGGACCATGAGGCAGCGGGAC-----CGTGAGGCTGGC----
RAT	974	AGGCAGCTGAGCGGGCTATGAGGCAGCGGGAC-----CGTGAGGCTGGC----
HOMO	335	AGGCAGCAGA-CGGGCCATGCGGCACGGTGAC-----CGGGA-GCTGGC----
PIG	1	-----
COW	1	-----
	1021	1021.....1030.....1040.....1050.....1060.....1070.....
FLOWER	355	-GAAAATCGACTTGCGAA-TCGCAAGCTTC-----
SOY	7	-----
FLY	532	-----TCCAGGGCGATCGCTTTGCCGCCGAGTCG
CELEGANS	211	ATGGACGACGCATCGGACGTCGGAAGTCTCTCGGTGAGCGCCCGCCGTGCCGCCGAACGT
FROG	366	TGAGAAGAGGCCT-----
TROUT	6	-----
DANIO	375	-----CTTGGCATGGGCC-----GCATCGGACGTGGACTCCTTTAC
MOUSE	426	-----AGAGGCCTGGGAC-----GCATGCGCCGGGGGCTGCTCTAT
RAT	1018	-----AGAGGCCTGGGTC-----GCATGCGTCGTGGGCTGCTGTAT
HOMO	377	-----CGGGGC--TGGGC-----GCATGCGCCGTGGGCTCCTGTAT
PIG	1	-----
COW	1	-----
	1081	1081.....1090.....1100.....1110.....1120.....1130.....
FLOWER	383	-----CTCATCTTCTTCACGATAAC-----GATTCAGATG
SOY	7	-----
FLY	562	GAGATG-----
CELEGANS	271	GAGATGGCTCAGCGTGATC-----AACTGC----TCGACGACGATGCTCTGATGTACGAG
FROG	379	-----
TROUT	6	-----
DANIO	411	GACA-----
MOUSE	462	G-----
RAT	1054	GGTATGTGTGGAGGGCATC-CCATAGGTGCCACTTGGACCACCAAAGCCT-----CGGG
HOMO	411	-----
PIG	1	-----
COW	1	-----
	1141	1141.....1150.....1160.....1170.....1180.....1190.....

FLOWER	413	ATTGGA	ACTATAGAC	-----	CTTCGA	AAGAGGTCTCGAACTACGGT	-TCCACCG	
SOY	7	-----	-----	-----	-----	-----	-----	
FLY	568	-----	-----	-----	CGTCGACGCGACCG	-GGCCGCCGGAATCCACCG	-----	
CELEGANS	322	GATGGAGATAGCGAGGAGGTTGACACACGTCGTCGTGGACGTGGACGTCGCGGT	CGA	-GG	-----	-----	-----	
FROG	379	-----	-----	-----	-----	-----	-----	
TROUT	6	-----	-----	-----	-----	-----	-----	
DANIO	415	----GTGA	---AGACGAGGATGACAAACG	-----	-----	-----	-----	
MOUSE	463	-----	-----	-----	-----	-----	-----	
RAT	1107	AGTGGGGA	---AGACATGGGTGGCAAGTGTGCAAAGGATGCTGG	-----	-----	-----	-----	
HOMO	411	-----	-----	-----	-----	-----	-----	
PIG	1	-----	-----	-----	-----	-----	-----	
COW	1	-----	-----	-----	-----	-----	-----	
	1201	120112101220123012401250
FLOWER	460	AGAGG	-TAATGGTGGTGATCCTGATGGGA	-----	-----	-----	-----	
SOY	7	-----	-----	-----	-----	-----	-----	
FLY	600	CGACGATCGTGATCTGGGTTTCGGT	CAG	-----	-----	-----	-----	
CELEGANS	381	TGATGCTGCTGATGACGATTCGGTTCGATGGAGGAAGAGGACATTCCTGTAGATATTCT	-----	-----	-----	-----	-----	
FROG	379	-----	-----	-----	-----	-----	-----	
TROUT	6	-----	-----	-----	-----	-----	-----	
DANIO	437	-----	-----	-----	-----	-----	-----	
MOUSE	463	-----	-----	-----	-----	-----	-----	
RAT	1148	-GAGAGACTTGCTCAC	-----	-----	AGGAGTTCCTTGCT	-----	-----	
HOMO	411	-----	-----	-----	-----	-----	-----	
PIG	1	-----	-----	-----	-----	-----	-----	
COW	1	-----	-----	-----	-----	-----	-----	
	1261	126112701280129013001310
FLOWER	488	----ATCCTCCAAGTTCG	-----	CCAGGAGTGT	CACA	-----	-----	
SOY	7	-----	TCG	-----	CC	-----	-----	
FLY	628	-----	-----	-----	TCCGATGATGAGGACGACGTTGG	-----	-----	
CELEGANS	441	CGAGAACATCCGCGGT	CGAACAAATCCGTGATCACGTCTCCGATGAGGCTGTC	-----	-----	-----	-----	
FROG	379	-----	ACT	-----	CTATGACAGCGACGAAGAGGAGGAAGA	-----	C	
TROUT	6	-----	-----	-----	-----	-----	-----	
DANIO	437	-----	-----	-----	GCCTACGAAGAGGCAGC	-----	G	
MOUSE	463	-----	-----	-----	ACAGCAGCGAGGAAGATGAGGA	-----	G	
RAT	1177	-----	ACTACCCAAGACAGCGACGAAGAAGATGAGGA	-----	-----	-----	G	
HOMO	411	-----	-----	-----	GACAGCGATGAGGAGGACGAGGA	-----	G	
PIG	1	-----	-----	-----	-----	-----	-----	
COW	1	-----	-----	-----	-----	-----	-----	
	1321	132113301340135013601370
FLOWER	516	-----	GCCAGATATCTCTATGACTGATCA	-----	-----	-----	-----	
SOY	12	-----	-----	-----	-----	-----	-----	
FLY	651	ACCCCGGGCC	--AAGAGACGAGCTGGCGA	-----	GAAG	-----	-----	
CELEGANS	493	-----	GCC--AAG	-----	GAGATTGAGC	-----	GAAGATTCAAGAATTTCTTC	
FROG	410	AGGCCAGCTCGAAAGCGC	-----	-----	AGGATGGCTGAACGT	-----	-----	
TROUT	6	-----	-----	-----	-----	-----	-----	
DANIO	455	TGTCCTGGCAGAGAGAGCAGCC	-----	GAAGGTGGAGCGATGGAGGGC	-----	-----	-----	
MOUSE	486	CGGCCTGCCCGTAAGCGCCGCCACGTAGAACGCGCCACAGAGGATGGC	-----	-----	-----	-----	-----	
RAT	1210	CGGCCTGCCCGTAAGCGCCGCCACATAGAGCGTGCCACAGAGGATGGC	-----	-----	-----	-----	-----	
HOMO	435	CGCCCTGCCCGCAAGCGCCGC	--CAGTGGAGCCGGCACGGAGGACGGC	-----	-----	-----	-----	
PIG	1	-----	-----	-----	-----	-----	-----	
COW	1	-----	-----	-----	-----	-----	-----	
	1381	138113901400141014201430
FLOWER	540	--AACTGATGATTATCAAGATGAGGATGATAATGATGATGAAGCAGAGT	-TTGAGATG	-T	-----	-----	-----	
SOY	12	-----	-----	-----	-----	-----	-----	
FLY	682	GCAGCTGTTGGC	--GAGGTAGAGGACACCGA	---	GATGGTGGAGTCTATTGAAAACCT	-----	-----	
CELEGANS	530	GAAGCT	----TC	-----	CACGAACCGGGCAACAA	---	GCAGACCAAGTATATTCA	
FROG	443	GCAGCTGAAGGGGCTCCTGAGGAAGATGAAGA	---	GATGATTGAGAGCATTGAAAACCT	-----	-----	-----	
TROUT	6	-----	-----	-----	-----	-----	-----	
DANIO	498	-----	-----	-----	GAGGATGAAGA	---	GATGATCGAAAGCATTGAGAACCT	
MOUSE	534	-----	-----	-----	GAGGAGGATGAAGA	---	GATGATCGAGAGTATTGAGAATCT	
RAT	1258	-----	-----	-----	GAGGAGGATGAAGA	---	GATGATTGAGAGTATTGAGAACCT	
HOMO	481	-----	-----	-----	GAGGAGGACGAGCA	---	GATGATTGAGAGCATCGAGAACCT	
PIG	1	-----	-----	-----	-----	-----	-----	
COW	1	-----	-----	-----	-----	-----	-----	
	1441	144114501460147014801490

FLOWER	596	ATAGGAT-TCAAGGAACTCT---GAGGGAATGGGTTATGAGAGATGAAGTGAG-ACGGT
SOY	12	-----
FLY	735	GGAGGATACCAAGGGACACTCAACTAAAGAGTGGGTCAGTATGCTAGGACCACGCACGGA
CELEGANS	573	-----GATGATCAAATCTATGGCGG-----CGGA
FROG	499	AGAGGATATGAAGGGTCATACCGTAAGAGAGTGGGTGTCAATGGCAGCCACTCG-ACTGG
TROUT	6	-----
DANIO	533	GGAGGACATGAAGGGCCACACCGGTGCGCGAGTGGGTTTCTATGGCCGCACCACG-ACTGG
MOUSE	572	GGAGGACCTCAAGGGCCACTCGGTGCGCGAGCGGGTGAGCATGGCAGGGCCCAG-GCTGG
RAT	1296	GGAGGACCTCAAGGGCCACTCGGTGCGGAGAGTGGGTGAGCATGGCAGGGCCCAG-ACTGG
HOMO	519	GGAGGATCTCAAAGGCCACTCTGTGCGCGAGTGGGTGAGCATGGCGGGCCCCCG-GCTGG
PIG	1	-----
COW	1	-----
	1501	1501.....1510.....1520.....1530.....1540.....1550.....
FLOWER	650	TTATTGCTAAGAAGTTTAAAGACTTTTTGCTTACGTATGTTAAACCAAAGAATGAGAATG
SOY	12	-----
FLY	795	-AATCGCCAATCGCTTTCAATCCTTTTTGAGAACTTTTGT-----GGATGAAAGGG
CELEGANS	597	TAATCGGGAATCGCTGGAAGTCAGTTTTACGGATCTTAGT-----GATGATAACG
FROG	558	AGATTTATCATCGCTTCAAGAATTTCTTGAGAACTCACGT-----TGATGAGCATG
TROUT	6	-----
DANIO	592	AGATCTACCACCGCTTCAAGAACTTCCTGCGCACGCACGT-----GGATGAGCACG
MOUSE	631	AGATCCACCACCGCTTCAAGAACTTCCTGCGCACCCACGT-----GGACAGCCATG
RAT	1355	AGATCCACCACCGTTTCAAGAACTTCCTGCGCACCCACGT-----GGACAGCCATG
HOMO	578	AGATCCACCACCGCTTCAAGAACTTCCTGCGCACTCACGT-----CGACAGCCACG
PIG	1	-----
COW	1	-----
	1561	1561.....1570.....1580.....1590.....1600.....1610.....
FLOWER	710	GAGATATTGAAT--ATGTTCTAATAAGTGCAGTCTGGAAA-----TTGA
SOY	12	-----
FLY	845	GCGCATAACCTATCGTGATCGCATACTCGGATGTGCGAGCAGAACATGTCTTTCGTTCCG
CELEGANS	647	-----GAGAGCAGAACATCT-----
FROG	609	GGCATAATGTCTTCAAAGAGAAAATCAGTGACATGTGCAAAGAAAACAAGGAAAGCCTGC
TROUT	6	-----
DANIO	643	GACATAATGTGTTTAAAGAGCGCATCAGCGACATGTGCAAAGAAAATAAGGAGAGTTTGC
MOUSE	682	GCCACAACGTCTTCAAGGAGCGCATCAGTGATATGTGCAAAGAGAACCGTGAGAGTTTGG
RAT	1406	GCCACAACGTCTTCAAGGAGCGTATCAGTGATATGTGCAAAGAGAACCGGGAGAGTTTGG
HOMO	629	GCCACAACGTCTTCAAGGAGCGCATCAGCGACATGTGCAAAGAGAACCGTGAGAGCCTGG
PIG	1	-----
COW	1	-----
	1621	1621.....1630.....1640.....1650.....1660.....1670.....
FLOWER	753	TTACAAAGAATTCATACACGTCCACCCGAATA-----TTGCAATCTGGCTTGCGGATG
SOY	12	-----
FLY	905	TCGTCTCCTACACTGATCTGGCCAACAAGGAACACGTATTGGCCTATTTCTGCCCAGGG
CELEGANS	662	-----CATACTTCTGCCAGAAG
FROG	669	CAGTAAACTATGAAGATCTTGCTGCTCGTGAGCATGTGTTGGCATATTTCTTGCCAGAAG
TROUT	6	-----
DANIO	703	TGGTGAACATATGAAGAGCTGGCTTCCAGAGAGCATGTGTTGGCGTATTTTCTACCAGAAG
MOUSE	742	TGGTAAATTATGAAGACCTGGCAGCCCGGAGCACGTGTTGGCATACTTCTGCCCAGAAG
RAT	1466	TGGTAAATTATGAAGACCTGGCAGCCCGGGAACATGTGTTGGCATACTTCTACCAGGG
HOMO	689	TGGTGAACATATGAGGACTTGGCAGCCAGGGAGCACGTGCTGGCCTACTTCTGCCTGAGG
PIG	1	-----
COW	1	-----
	1681	1681.....1690.....1700.....1710.....1720.....1730.....
FLOWER	806	CTCCACAACCTGTGCTTGAAGTAATGGAGGAAGTTTCTGAAAAGGTCATCTTTGATCTGC
SOY	12	-----
FLY	965	CTCCCTTTCAAATGCTCGAGATTTTCGATAAAGTGGCTAAGGACATGGTGCTCTCCATTT
CELEGANS	680	CTCCGAATGAGATGCTTGCGATTATGGATCGCGCCGCACTGAAGTCGTGATGAACATGT
FROG	729	CTCCTGCTGAAATGCTTAAGATATTTGATGAAGCTGCCAAAGAGGTAGTATTGGTCATGT
TROUT	6	-----
DANIO	763	CTCCTGCCGAAATGCTGAAGATCTTTGACGAAGCAGCAAAGAAGTTGTACTTGCCATGT
MOUSE	802	CACCGGCTGAGTTGCTGCAGATCTTTGACGAGGCTGCCCTGGAGGTCGTGTTGGCCATGT
RAT	1526	CACCGGCTGAGCTGCTGCAGATCTTCGATGAGGCTGCCCTGGAGGTTGTGCTGGCCATGT
HOMO	749	CACCGGCGGAGCTGCTGCAGATCTTTGATGAGGCTGCCCTGGAGGTTGTACTGGCCATGT
PIG	1	-----
COW	1	-----
	1741	1741.....1750.....1760.....1770.....1780.....1790.....

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FLOWER      866  ATCCAAACTACAA-----
SOY         12  -----
FLY        1025  TCCCCACTTACGAACGTGTACCACAGAGATTCACGTGCGCATCTCGGAGCTGCCGCTGA
CELEGANS   740  ATCCATTCTACTCCCGAGTCTGCAATGAGATCAA-----
FROG       789  ACCCCAAATATGACCGAATTGCTCGGGAGATTCATGTCCGCATATCTCATCTTCTCTGG
TROUT      6  -----
DANIO      823  ACCCCAAATACGACCGAATTGCACATGAAATCCACGTGAGAATCGGTAATCTACCATTGG
MOUSE      862  ACCCTAAATATGACCGTATCACCACCCACATCCATGTGCGCATCTCCACCTGCCTCTGG
RAT       1586  ACCCTAAATATGACCGCATCACCACCCACATTCACGTGCGCATCTCCACCTGCCTCTGG
HOMO       809  ACCCCAAGTACGACCGCATCACCACCCACATCCATGTCCGCATCTCCACCTGCCTCTGG
PIG        1  -----
COW        1  -----
1801 1801.....1810.....1820.....1830.....1840.....1850.....

FLOWER      879  -----GAATATTCACACGAAGATATATGTTTCGTGTTACCAACC
SOY         12  -----
FLY        1085  TCGAGGAGCTGCGCACATTCAGAAAACCTGCATCTGAACCAGTTGGTTCGCACTTTG----
CELEGANS   774  -----GGTTCGCATTTTCGCAGC
FROG       849  TAGAAGAGCTGCGTTCCTTTAAGGCAGCTACACTTGAACCA-----
TROUT      6  -----
DANIO      883  TGGAGGAGCTTCGATCACTCAGGCAACTCCACTTGAATCA-----
MOUSE      922  TGGAGGAGCTGCGTTCCTGAGGCAGTTGCACCTGAACCA-----
RAT       1646  TGGAGGAGCTGCGTTCCTGAGGCAGCTACACCTGAACCA-----
HOMO       869  TGGAGGAGCTGCGCTCGCTGAGGCAGCTGCATCTGAACCA-----
PIG        1  -----
COW        1  -----
1861 1861.....1870.....1880.....1890.....1900.....1910.....

FLOWER      917  TACCAGTTAATGATCAGATTCGGAACATCAGGCAGATTCATCTTAACACGATGATCCGTA
SOY         12  -----
FLY        1141  -----
CELEGANS   791  TTCCAGTCGAGGAGGACATCCGAATGCTTCGTCAGGTGCATCTTAACATGCTCATCCGTA
FROG       889  -----GCTGATACGCA
TROUT      6  -----
DANIO      923  -----GCTGATCCGCA
MOUSE      962  -----GCTGATCCGTA
RAT       1686  -----GCTCATCCGTA
HOMO       909  -----GCTGATCCGCA
PIG        1  -----
COW        1  -----
1921 1921.....1930.....1940.....1950.....1960.....1970.....

FLOWER      977  TCGGTGGAGTTGTCACTAGGCGTTCTGGGGTCTTTCTCAGCTGCAGCAAGTGAATATG
SOY         12  -----
FLY        1141  -----GGCGTGGTAACTGCCACCA-----
CELEGANS   851  CCGCCGGTGTGTCACTATCGCCAGTGAATTCGCCGAGTTGGCGGTTGTTAAATACG
FROG       900  CAAGTGGTGTGGTGACCTGTTGCACAGGAGTCCTG-----
TROUT      6  -----
DANIO      934  CTAGTGGTGTGCGTGACCAGCTGCACTGGAGTTCTT-----
MOUSE      973  CCAGTGGCGTGGTGACCAGCTGCACCGGAGTCCTG-----
RAT       1697  CCAGCGGTGTGGTGACCAGCTGCACTGGAGTCCTG-----
HOMO       920  CCAGTGGGGTGGTGACCAGCTGCACTGGCGTCCTG-----
PIG        1  -----
COW        1  -----
1981 1981.....1990.....2000.....2010.....2020.....2030.....

FLOWER      1037  AT-----
SOY         12  -----
FLY        1160  -----
CELEGANS   911  ATTGTGTCGCTTGTGGATACTTGTGGGACCTTTTGTACAGCAAATGATGAGGAAGTTC
FROG       935  -----
TROUT      6  -----
DANIO      969  -----
MOUSE     1008  -----
RAT       1732  -----
HOMO       955  -----
PIG        1  -----
COW        1  -----
2041 2041.....2050.....2060.....2070.....2080.....2090.....

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FLOWER 1039 -----
SOY 12 -----
FLY 1160 -----
CELEGANS 971 GCCCAACGATTTGTCATCGTGTGTCAGGAAAAGGACCATTTCGAGTTGAACGTTGAAAATA
FROG 935 -----
TROUT 6 -----
DANIO 969 -----
MOUSE 1008 -----
RAT 1732 -----
HOMO 955 -----
PIG 1 -----
COW 1 -----
2101 2101.....2110.....2120.....2130.....2140.....2150.....

FLOWER 1039 -----
SOY 12 -----
FLY 1160 -----
CELEGANS 1031 CTGTCTACCACAACACTACCAACGAATCACAATGCAAGAATCCCCGAACAAAGTTGCCGCTG
FROG 935 -----
TROUT 6 -----
DANIO 969 -----
MOUSE 1008 -----
RAT 1732 -----
HOMO 955 -----
PIG 1 -----
COW 1 -----
2161 2161.....2170.....2180.....2190.....2200.....2210.....

FLOWER 1039 -----TGTAACAAGTGTGGAGCAGTTTTGG
SOY 12 -----
FLY 1163 GAGTTCTTCCCCAGCTATCCGTGATCAAGTACGACTGCGTTAAGTGGGCTATGTGCTGG
CELEGANS 1091 GACGTCTTCCCC-----
FROG 935 -----CCGCAGCTCAGTATGGTGAAATACAATTGTAATAAGTGAATTTATCCTCG
TROUT 6 -----
DANIO 969 -----CCTCAGCTTGGGATGGTCAAATACAACCTGTAACAAGTGAACCTTTATTTTGG
MOUSE 1008 -----CCCCAGCTCAGCATGGTCAAGTACAACCTGTAGCAAGTGAACCTTTGTACTGG
RAT 1732 -----CCCCAGCTCAGCATGGTCAAGTATAACTGTAGCAAGTGAACCTTTATACTGG
HOMO 955 -----CCCCAGCTCAGCATGGTCAAGTACAACCTGCAACAAGTGAATTTGCTCCTGG
PIG 1 -----
COW 1 -----
2221 2221.....2230.....2240.....2250.....2260.....2270.....

FLOWER 1064 GGCCTTTCTTCCAAAACCTTATTTCAGAAG-TCAAGGTCGGTTCTTGTTCTGAATGCCAG
SOY 12 -----
FLY 1223 GTCCTTTCGTTT-AGTCGCAAAATACGGAGATAAAGCCCGTTTCTGCCAGAGTGCCAG
CELEGANS 1103 -----GTTT-----
FROG 987 GGCCTTTCTTCC-AGTCGCAGAATCAGGAGGTTAGGCCAGGTTCTTGTTCCGAGTGTCAG
TROUT 6 -----GAGGTG-----
DANIO 1021 GGCCGTTCTTCC-AGTCTCAGAACCAGGAGGTGAAGCCGGGCTCCTGTCTGAATGTCAG
MOUSE 1060 GGCCTTTCTGCC-AGTCTCAGAATCAGGAGGTGAAGCCTGGCTCCTGCCCTGAGTGCCAG
RAT 1784 GGCCTTTCTGCC-AGTCTCAGAACCAGGAGGTGAAGCCTGGTTCTGCCCTGAGTGCCAG
HOMO 1007 GTCCTTTCTGCC-AGTCCCAGAACCAGGAGGTGAAACCAGGCTCCTGTCTGAGTGCCAG
PIG 1 -----
COW 1 -----
2281 2281.....2290.....2300.....2310.....2320.....2330.....

FLOWER 1123 TCAAAGGACCGTTTACTGTTAATGTCGAACAGACAATATACAGGAACTATCAGAAGCTT
SOY 12 -----
FLY 1282 AGCACTGGACCCTTCTCAATCAACATGGAGCAGACGTTGTATCGAAATTATCAAAGATC
CELEGANS 1107 -----
FROG 1046 TCTTTTGGACCCTTTGAAATCAACATGGAAGAGACTGTATACCAGAATTATCAGCGCATT
TROUT 12 -----
DANIO 1080 TCGCTCGGGCCCTTCGAAATCAACATGGAGCAGACGGTGTACCAGAACTACCAGCGCATC
MOUSE 1119 TCTGCTGGGCCCTTTGAGATCAACATGGAGGAGACCATCTATCAGAACTACCAACGTATC
RAT 1843 TCAACTGGGCCCTTTGAGATCAACATGGAGGAGACCATCTATCAGAACTACCAACGGATC
HOMO 1066 TCGGCCGGCCCTTTGAGGTCAACATGGAGGAGACCATCTATCAGAACTACCAGCGTATC
PIG 1 -----
COW 1 -----
2341 2341.....2350.....2360.....2370.....2380.....2390.....

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FLOWER	1183	ACAATCCAAGAGAGTCCAGGAACAGTGCCTGCTGGACGACTTCCAAGACACAAAGAAGTT
SOY	12	-----
FLY	1342	ACGTTGCAGGAGTCGCCAGGCAGGATTCCAGCCGGACGCATTCTCGCAGCAAGGATGTC
CELEGANS	1107	-----TAAAGATGTG
FROG	1106	ACAATTCAGGAGAGTCCAGGGAAGTGGCAGCTGGCAGGTTGCCACGTTCAAAGGATGCA
TROUT	12	-----
DANIO	1140	ACCATTTCAGGAGAGTCTCTGGGAAAGTGGCTGCTGGTTCGCTGCCTCGATCTAAAGACGCC
MOUSE	1179	CGCATCCAGGAGAGTCCCGCAAGGTGGCGGCTGGCCGACTGCCCGTTCCAAGGATGCC
RAT	1903	CGCATCCAGGAGAGTCCCGCAAGGTGGCAGCTGGCCGCTGCCCGTTCCAAGGATGCC
HOMO	1126	CGAATCCAGGAGAGTCCAGGCAAAGTGGCGGCTCGGCGGCTGCCCGCTCCAAGGACGCC
PIG	1	-----
COW	1	-----
	2401	2401.....2410.....2420.....2430.....2440.....2450.....
FLOWER	1243	ATCCTGCTGAATGACCTTATTGATTGCGCTCGTCTGGGGAAGAAATTGAGGTTACTGGC
SOY	12	-----
FLY	1402	ATTTTGCTCGCTGATTTGTGTGATCAATGCAAGCCTGGAGATGAACCTGAGGTCACAGGT
CELEGANS	1117	ATTCTTCTCGGTGATCTCTGTGATTCATGTAAACCTGGAGACGAGATCGAGGTGACCGGC
FROG	1166	ATCCTGCTTGACAGATCTTGTGACAGCTGCAAACCAGGGGATGAAATTGAACTAACTGGA
TROUT	12	-----
DANIO	1200	ATCCTGCTTGACAGACCTGGTGGACATGTGTAAACCCGGAGATGAGATCGAGCTCACTGGA
MOUSE	1239	ATTCTCCTCGCTGATCTGGTGGACAGCTGCAAGCCAGGGGACGAGATTGAGCTGACCGGC
RAT	1963	ATCCTCCTTGCTGATCTGGTGGACAGCTGCAAGCCAGGAGACGAGATAGAGCTGACCGGC
HOMO	1186	ATTCTCCTCGCAGATCTGGTGGACAGCTGCAAGCCAGGAGACGAGATAGAGCTGACTGGC
PIG	1	-----
COW	1	-----
	2461	2461.....2470.....2480.....2490.....2500.....2510.....
FLOWER	1303	ATATATACCAACAACCTTTGACCTATCTTTGAACACAAAG-----
SOY	12	-----
FLY	1462	ATATA-----
CELEGANS	1177	GTCTACACGAACAATTTGACGGATCGCTCAACTATAAGCAGGGATTCCAGTGTTCAAT
FROG	1226	ATCTAT---CACAAT-----AATTAT-----
TROUT	12	-----
DANIO	1260	ATCTAC---CACAAC-----AATTAT-----
MOUSE	1299	ATTTAC---CATAAT-----AATTAT-----
RAT	2023	ATTTAC---CACAAT-----AATTAT-----
HOMO	1246	ATCTAT---CACAAC-----AATTAT-----
PIG	1	-----
COW	1	-----
	2521	2521.....2530.....2540.....2550.....2560.....2570.....
FLOWER	1342	-----A
SOY	12	-----
FLY	1467	-----TACCAATAACTAC--GATGGCTCCTTGAACACCGACC
CELEGANS	1237	ACGTTGATCCACGCGAATCATATCACCAATAAAGACAAGATGGC-----GTCGGATC
FROG	1244	-----GATGGATCTCTCAACACTGCTA
TROUT	12	-----
DANIO	1278	-----GACGGCTCTCTAAACATGGCCA
MOUSE	1317	-----GACGGCTCGCTTAACACCGCCA
RAT	2041	-----GATGGCTCACTTAACACCACCA
HOMO	1264	-----GATGGCTCCCTCAACACTGCCA
PIG	1	-----
COW	1	-----
	2581	2581.....2590.....2600.....2610.....2620.....2630.....
FLOWER	1343	ATGGGTTTCCAGTCTTTGCCACTGTGGTGGAGCTAACTATGTTACAAAGAAACAAGACC
SOY	12	-----
FLY	1502	AAGGATTTCCCGTGTGTTGCCACCGTGATTATTGCCAATCATGTGGTTGTAAAGGACTCCA
CELEGANS	1289	AA-----
FROG	1266	ATGGTTTTCCGGTGTGTTGCGACCGTTATCCTTGCCAATCACATCACTAAGAAAGATGACA
TROUT	12	-----TTCGCTACGGTCATCATGGCCAATCACATCGCTCGGAGAGACAACA
DANIO	1300	ATGGTTTTCCCGTCTTCGCCACCGTGATCTTAGCCAATCACATCGCTCGAAAGGACGAGG
MOUSE	1339	ACGGCTTTCCAGTCTTTGCCACTATTATCTTGCCAACCATGTTGCCAAGAAGGACAACA
RAT	2063	ACGGCTTTCCCGTCTTCGCCACCATCATCTTGCCAACCCAGTTGCCAAGAAGGACAACA
HOMO	1286	ATGGCTTCCTGTCTTTGCCACTGTCATCTAGCCAACCCAGTTGCCAAGAAGGACAACA
PIG	1	-----
COW	1	-----
	2641	2641.....2650.....2660.....2670.....2680.....2690.....

FLOWER	1403	TCTTCTCTGCGTACAAGCTAACCCAAGAAGACAAGACACAAATCGAAGAGCTATCCAAGG
SOY	12	-----
FLY	1562	AGCAGGTAGTGCAGTCGCTTACGGACGAGGACATTGCCACCATTGAGAAGTTGAGCAAGG
CELEGANS	1291	-----CTGACCGATGAGGATATCAAGGCGATTCTGTGAGCTCTCCAGG
FROG	1326	AAGTAGCAGTGGGGGAGCTGACAGATGAGGATGTCAAGGCAATTGTAGCACTTTCCAAG
TROUT	58	AAGTGGCCGTGGCCGAGCTCACTGACGAGGACGTCAAGGCCATCGTGGCGCTGTCTAAGG
DANIO	1360	GCGTGGCTGTGGCGGAGCTCACCGATGAAGACGTCAAAGCCATCGTTGCACTGTCCAAG
MOUSE	1399	AAGTAGCTGTGGGGGAGCTCACCGATGAGGACGTGAAGATGATCACCAGTCTTTCCAAGG
RAT	2123	AAGTGGCCGTGGGGTGGAGCTCACTGATGAGGACGTGAAGATGATCACCAGTCTTTCCAAGG
HOMO	1346	AGGTTGCTGTAGGGGAACTGACCGATGAAGATGTGAAGATGATCACTAGCCTCTCCAAGG
PIG	1	-----
COW	1	-----
	2701	2701.....2710.....2720.....2730.....2740.....2750.....
FLOWER	1463	ATCCACGAATAGTTGA-----ACGTATCATTAAAGTCAATTGCTCCGTCAATATATGGCC
SOY	12	-----
FLY	1622	ATCCGCGTATCGTAGA-----GCGTGTAGTAGCATCCATGGCGCCTTCTATATACGGAC
CELEGANS	1334	ATCCGAATATCTCGCA-----ACGAGTGTTCTCATCGATTGCACCCTCCATCTATGGAC
FROG	1386	ATGAACGGATTGGAGAAA-----GAATATTTGCAAGCATTGCTCCATCTATCTATGGGC
TROUT	118	ACGAGCGCATCGGGGAGAGG-----ATCTTTGCCAGTATCGGCCCTCCATCTACGGCC
DANIO	1420	ACGAGCGCATTTGGCGAAAGG-----ATTTTCGCAAGTATTGGACCCTCAATCTACGGAC
MOUSE	1459	ATCAGCAAATTTGGAGAGAAG-----ATCTTTGCCAGCATTGCACCCTCCATCTATGGGC
RAT	2183	ATCAGCAAATCGGAGAGAAGGCAGGTATCTTTGCCAGCATTGCACCCTCCATCTATGGGC
HOMO	1406	ATCAGCAGATCGGAGAGAAG-----ATCTTTGCCAGCATTGCTCCTTCCATCTATGGTC
PIG	1	-----
COW	1	-----
	2761	2761.....2770.....2780.....2790.....2800.....2810.....
FLOWER	1517	ACGAAGATATCAAAACAGCTCTTGCTCTTGCTATGTTTGGTGGCCAAGAGAAAAATATCA
SOY	12	-----
FLY	1676	ATGATTATATCAAGAGGGCGCTGGCCTTAGCTCTCTTTGGGGG---TGAGTCAAAGAATC
CELEGANS	1388	ATGACGATGTTAAGAGAGCTATTGCGTTGGCATTGTTTCAGAGG---AGAAGCTAAGAATC
FROG	1440	ATGAAGATATTAAGAGAGGGCTGGCACTTGCTTTATTGGCGG---AGAAGCAAAAACC
TROUT	172	ACGAGGACATCAAAAGAGGCCTGGCTCTGGCTCTGTTTGGTGG---AGAGCCCAAGAATC
DANIO	1474	ACGAGGACATTAACCGTGGTCTGGCACTTGCTCTGTTTGGTGG---CGAAGCTAAAATC
MOUSE	1513	ATGAAGACATCAAGAGAGGCCTGGCTCTGGCCTGTTTGGAGG---GGAGCCCAAGAACC
RAT	2243	ATGAAGACATCAAGAGAGGCCTGGCTCTGGCTCTGTTTGGAGG---GGAGCCCAAGAACC
HOMO	1460	ATGAAGACATCAAGAGAGGCCCTGCTCTGGCCCTGTTTCGGAGG---GGAGCCCAAAAACC
PIG	1	-----
COW	1	-----
	2821	2821.....2830.....2840.....2850.....2860.....2870.....
FLOWER	1577	AAGG---GAAACACAGATTGCGTGGAGATATTAATGTACTTTTACTAGGTGATCCAGGAA
SOY	12	-----TGAGGGGAGACATAAATGTTCTTCTTCGGTGATCCAGGGA
FLY	1733	CCGGTGAGAAACACAAGGTAGAGGTGATATAAACCTACTCATCTGTGGAGATCCCGGAA
CELEGANS	1445	CGGGAGCCAAGCATCGTCTTAGAGGAGATATTAATGTTCTTCTTGTGGAGATCCTGGAA
FROG	1497	CTGGAGGGAAACACAAGTCCGTGGTATATTAATGTCTATTGTGCGGTGATCCAGGAA
TROUT	229	CAGGTGGGAAACACAAGGTTCGTGGGACCTAACGTGCTCCTGTGCGGTGACCCCGGTA
DANIO	1531	CAGGTGGGAAGCACAAAGTGCCTGGTATATAAACGTCTCCTGTGTGGAGATCCCGGCA
MOUSE	1570	CAGGTGGAAAGCACAAAGTTCGAGGTGACATTAATGTGCTCTTGTGTGGGACCCCTGGCA
RAT	2300	CAGGTGGAAAGCACAAAGTTCGAGGTGACATCAATGTGCTCCTGTGTGGGACCCCTGGCA
HOMO	1517	CAGGTGGCAAGCACAAAGTACGTGGTATATCAACGTGCTCCTTGTGCGGAGACCCCTGGCA
PIG	1	-----
COW	1	-----
	2881	2881.....2890.....2900.....2910.....2920.....2930.....
FLOWER	1634	CAGCAAAATCACAAATTTCTGAAGTATGTTGAAAAAAGTGGTCAAAGAGCTGTCTACACGA
SOY	54	CAGCGAAGTCTCAGTTTCTCAAGTATGTTGAAAAAAGTGGACAGAGAGCTGTATACACTA
FLY	1793	CGGCAAAGTCGCAGTTTCTCAAGTACACCGAAAAGGTTGCGCCACGTGCGGTTTTTCACGA
CELEGANS	1505	CCGCGAAAATCTCAATTCCTGAGATATGCTGCTCACATCGCACCACGATCCGTTTCTCACGA
FROG	1557	CTGCCAAATCTCAGTTTCTGAAATATGTTGAAAAAGTAGCCAGTCCGGCCGTATTACCA
TROUT	289	CGGCCAAGTCCCAGTTCTTAAGTACGTTGAGAAGGTTGGCCAGCAGAGCGGTGTTACCA
DANIO	1591	CGCTAAATCTCAGTTTCTCAAGTACGTTGAGAAGGTTGGCCAGTCCGAGTCCGATTTACCA
MOUSE	1630	CAGCAAAGTCCCAGTTTCTCAATACATCGAGAAAGTGTCTAGCCGTGCCATTTTACCA
RAT	2360	CAGCGAAGTCCCAGTTTCTCAATACATCGAGAAAGTATCTAGCCGTGCCATTTTACCA
HOMO	1577	CAGCGAAGTCCGAGTTTCTCAAGTATATTGAGAAGGTTCCAGCCGAGCCATTTTACCA
PIG	1	-----
COW	1	-----
	2941	2941.....2950.....2960.....2970.....2980.....2990.....

FLOWER	1694	CTGGAAAGGGAGCTTCTGCTGTTGGTCTAACCGCAGCAGTACACAAAGATCCAGTTACAA
SOY	114	CTGGTAAAGGGGCTTCTGCCGTGGGTCTTACTGCCGCGTTTCATAAGGATCCAGTCACAA
FLY	1853	CTGGGCAGGGAGCCAGTGCCGTGGGTCTCACGGCTTATGTGCGCCGCAATCCAGTATCTC
CELEGANS	1565	CTGGACAAGGAGCATCAGCTGTGGATTAACCGCCTACGTGCAACGTCACTCTGTGACAC
FROG	1617	CAGGACAGGGTGCCTCTGCTGTAGGTCTGACAGCCTATGTGCAGCGCCATCCAGTTACTA
TROUT	349	CAGGCCAGGGAGCCTCCGCTGTGGGCCTGACCGCCTACGTACAGAGACACCCAGTCACCA
DANIO	1651	CAGGACAGGGAGCCTCCGCTGTGGGTCTGACGGCTTACGTGCAGCGGCATCCCGTCAGCC
MOUSE	1690	CTGGCCAGGGTGCCTCAGCAGTGGGTCTCACCGGTACGTTACAGCGGCATCCCGTCAGCA
RAT	2420	CCGGCCAGGGTGCCTCAGCAGTGGGTCTCACAGCGTATGTTACAGCGGCATCCCTGTAGCA
HOMO	1637	CTGGCCAGGGGCGTCCGCTGTGGCCGTACAGCGGTATGTCCAGCGGCACCCCTGTAGCA
PIG	1	-----
COW	1	-----
	3001	3001.....3010.....3020.....3030.....3040.....3050.....
FLOWER	1754	GGGAGTGGACGCTTGAAGGAGGGGCTCTTGTACTTGCTGACCGAGGAATTTGTCTTATCG
SOY	174	GGGAGTGGACTCTTGAAGGGGGGCGCTTGTCTAGCTGACAGAGGAATTTGTCTTATTG
FLY	1913	GGGAGTGGACATTGAAGCGGGTGTCTGGTCTGCTGATCAGGGAGTTTGTCTAATCG
CELEGANS	1625	GTGAATGGACATTGAAGCCGGAGCCATGGTCTCGCTGATAAGGGTGTCTGCCTGATCG
FROG	1677	AGGAATGGACATTGAAGCTGGAGCTTGTCTTGGCAGACAGGGGTGTTTGCTTAATTG
TROUT	409	GGGAGTGGACCCTGGAGCTGGAGCCCTGGTGTAGCAGACAGAGGAGTCTGTCTCATCG
DANIO	1711	GAGAGTGGACGCTGGAGCCGGAGCCTTAGTGTCTGGCGACAGAGGAGTGTGTCTTATTG
MOUSE	1750	GAGAGTGGACCTTAGAGGCGGGAGCCCTGGTCTGGCTGACCGGGGGGTGTGTCTCATTG
RAT	2480	GAGAGTGGACCTTAGAGGCTGGAGCCCTGGTCTGGCCGACCGGGGAGTGTGTCTCATTG
HOMO	1697	GGGAGTGGACCTTGGAGGCTGGGGCCCTGGTCTGGCTGACCGAGGAGTGTGTCTCATTG
PIG	1	-----
COW	1	-----
	3061	3061.....3070.....3080.....3090.....3100.....3110.....
FLOWER	1814	ATGAGTTTGACAAGATGAACGACCAGGACAGGGTGAGTATCCATGAAGCCATGGAAACAAC
SOY	234	ATGAGTTTGACAAGATGAATGACCAGGATAGGGTGAGCATCCATGAAGCCATGGAGCAGC
FLY	1973	ACGAGTTTGACAAAATGAACGACCAGGATCGTACCTCTATTACGAAGCCATGGAGCAGC
CELEGANS	1685	ATGAGTTTGATAAGATGTCCGATCAGGATCGTACCTCGATTACGAAGCAATGGAGCAGC
FROG	1737	ATGAGTTTGACAAGATGAATGACCAGGACAGAACCCAGTATTTCATGAAGCCATGGAAACAGC
TROUT	469	ACGAGTTTGATAAGATGAATGATGCAGACAGAACCAGTATCCATGAGGCCATGGAAACAAC
DANIO	1771	ATGAGTTTGATAAGATGAACGATCAGGACAGAACCAGCATTACGAGGCCATGGAGCAGC
MOUSE	1810	ACGAGTTTGACAAGATGAATGACCAGGACAGGACCAGCATCCACGAGGCCATGGAAACAGC
RAT	2540	ATGAGTTTGACAAGATGAATGACCAGGACAGGACCAGCATCCACGAGGCCATGGAGCAGC
HOMO	1757	ATGAATTTGACAAGATGAATGACCAGGACAGAACCAGCATCCATGAGGCCATGGAGCAAC
PIG	1	-----
COW	1	-----
	3121	3121.....3130.....3140.....3150.....3160.....3170.....
FLOWER	1874	AGAGTATTAGTATATCGAAGGCAGGAATAGTTACTTCTCTTCAAGCTCGTTGCTCTGTTA
SOY	294	AGAGTATAAGCATATCAAAAAGCTGGAATTTGTACATCTCTTCAGGCACGCTGTTCTGTTA
FLY	2033	AGTCTATTTTCGATTTCCAAGGCTGGTATTGTACCTCTCTTCAAGCTCGTTGCACCGTGA
CELEGANS	1745	AGTCGATTTTCGATTTCCAAGGCCGGAATTGTTACATCTCTCCACGCCCGATGCACGGTCA
FROG	1797	AAAGTATTTCCATCTCCAAGGCAGGCATTGTAACCTCTCTGCAGGCCCGATGCACAGTTA
TROUT	529	AGAGCATCTCCATCTCCAAGGCTGGCATCGTCACCTCGCTCCAGGCACGCTGTACTATCA
DANIO	1831	AGAGCATCTCCATTTCCAAGGCAGGAATCGTGACTTCTCTCCAGGCCCGCTGCACCGTCA
MOUSE	1870	AAAGCATCTCCATCTCCAAGGCTGGCATCGTTACCTCGCTGCAAGCCCGCTGCACCTGTC
RAT	2600	AAAGCATCTCCATCTCCAAGGCCGATCGTTACCTCACTGCAAGCCCGCTGCACCGTCA
HOMO	1817	AGAGCATCTCCATCTCGAAGGCTGGCATCGTCACCTCCCTGCAGGCTCGCTGCACGGTCA
PIG	1	-----
COW	1	-----
	3181	3181.....3190.....3200.....3210.....3220.....3230.....
FLOWER	1934	TTGCTGCAGCTAATCCAGTTGGTGGAAAGGTATGATTTCATCGAAATCATTTCACAAAATG
SOY	354	TTGCTGCGGCAAACTCTGTTGGTGGAAAGATATGATTCTCAAAAACATTCTCTCAAAAATG
FLY	2093	TTGCTGCTGCCAATCCCATTTGGCGGTCGCTATGATCCGTCGATGACCTTCTCGGAGAACG
CELEGANS	1805	TCGCCGCTTCTAACCCGATCGGTGGACGCTACAACCCGACGAGAACCCTTTGCCGAAAACG
FROG	1857	TAGCTGCTTCAAACCCTATTGGTGGTCGTTACGACCCTTCGTTGACTTTTTCGGAAAACG
TROUT	589	TCGCTGCTGCCAACCCATTCGGTGGTCGCTACGACACGTCCTCTGACCTTCTCTGAGAACG
DANIO	1891	TCGCTGCTGCCAATCCCATTCGGTGGTCGCTACGACACGTCCTCTAACGTTTTCGGAAAACG
MOUSE	1930	TAGCTGCTGCCAACCCCATAGGAGGCGCTACGACCCTTCACTGACCTTCTCAGAGAATG
RAT	2660	TAGCTGCTGCCAACCCCATAGGAGGCGCTACGACCCTTCACTGACCTTCTCAGAGAATG
HOMO	1877	TTGCTGCGGCAACCCCATAGGAGGCGCTACGACCCTTCGCTGACTTTCTCTGAGAACG
PIG	1	-----
COW	1	-----
	3241	3241.....3250.....3260.....3270.....3280.....3290.....

FLOWER 2265 AGATG--CCAAGA--AGTTAGAGACTGTTTATGCTAATCTAAGACGAGAATCAATGA--A
SOY 561 -----
FLY 2399 ACATCGACGAGGACAAGATCGCCAAGATGTACGCCAGCTGCGACAGGAGTCTTTTGCCA
CELEGANS 2103 -----
FROG 2178 AGATGGACCAAGACAAAGTTGCCAAGATGTACAGTGACCTTAGGAAGGAGTCTATGGCTA
TROUT 800 -----
DANIO 2212 AGATGGACCAGGACAAAGTGGCCCGCATTACAGCGACCTACGAAAAGAGTCTATGGCTA
MOUSE 2260 AGATGGACCAGGATAAAGTGGCCAGGATGTACAGTGACCTGAGGAAGGAGTCCATGGCAA
RAT 2990 AGATGGACCAGGACAAAGTGGCCAGGATGTACAGCGACCTGAGGAAGGAGTCCATGGCAA
HOMO 2207 AGATGGACCAGGACAAAGTGGCCAAGATGTACAGTGACCTGAGGAAGAATCTATGGCGA
PIG 249 AGATGGACCAGGACAAAGTGGCCAAGATGTACAGTGACCTGAGGAAGGAGTCCATGGCCA
COW 140 AGATGGACCAGGACAAAGTGGCCAAGATGTACAGTGACCTGAGGAAGGAGTCCATGGCCA
3601 3601.....3610.....3620.....3630.....3640.....3650.....

FLOWER 2319 CGGACAAGGAGTTTCTATAGCGACAAGGCACCTTGAGTCCATGATCCGAATGTCTGAAGC
SOY 561 -----
FLY 2459 CGGGCT--CACTGCCATTACGGTGCCTCACATTGAGAGTGTCCGAATGTCCGAAGC
CELEGANS 2103 -----
FROG 2238 CTGGCA--GCATCCCAATTACTGTTTCGACATATTGAGTCTATGATTGCGATGGCTGAGGC
TROUT 800 -----
DANIO 2272 CAGGAA--GTATCCCGATTACTGTGCGTACATCGAGTCTATGATCCGTATGGCCGAGGC
MOUSE 2320 CGGGCA--GCATTCCCATCACGGTGCGCCACATCGAGTCCATGATCCGCATGGCCGAGGC
RAT 3050 CGGGCA--GTATTCCCATCACAGTGCAGCACATCGAGTCCATGATCCGCATGGCAGAGGC
HOMO 2267 CAGGCA--GCATCCCATACGGTGCGGCACATCGAGTCCATGAGTC--ATGGCCGAGGC
PIG 309 CAGGCA--GCATCCCATCACAGTGCGGCACATTGAGTCCATGATCCGCATGGCTGAGGC
COW 200 CGGGCA--GCATCCCATCACCGTGCGGCATATCGAGTCCATGATCCGCATGGCCGAGGC
3661 3661.....3670.....3680.....3690.....3700.....3710.....

FLOWER 2379 ACATGCTAGGATGCACCTTAGGCAATATGTCACAGAAGAGGATGTTAATATGGCCATTCG
SOY 561 -----
FLY 2517 GCACGCGCGGATGCATCTGCGCGAAAACGTAATGGAGGCAGATGTCAGCATGGCCATCCG
CELEGANS 2103 -----ACGTGAGAAGTGCCATCCG
FROG 2296 TCATGCCCGAATGCACCTGCGAGACTATGTTGTGGAGGATGATGTAACATGGCCATC--
TROUT 800 -----
DANIO 2330 TCACGCTCGCATGCATCTGCGCGACTACGTGCTGGAGGACGACGTCAACATGGCCATC--
MOUSE 2378 CCATGCCCAGCATGCACCTGCGGGACTACGTGATGGAAGACGATGTCAACATGGCCATC--
RAT 3108 CCATGCACGCATGCACCTGCGAGACTACGTGATGGAAGATGATGTCAACATGGCCATC--
HOMO 2323 CCACGCGCGCATCCATCTGCGGGACTATGTGATCGAAGACGACGTCAACATGGCCATC--
PIG 367 CCACGCGCGCATCCACCTGCGGGACTACGTGATGGAGGACGATGTCAACATGGCCATC--
COW 258 CCATGCGCGCATGCACCTGCGGGACTACGTGATGGAGGACGACGTGAACATGGCCATC--
3721 3721.....3730.....3740.....3750.....3760.....3770.....

FLOWER 2439 AGTCCTACT-----
SOY 561 -----
FLY 2577 CA-----
CELEGANS 2122 ACGCTTCTGAACAGCATTCTGAGAAGTTTTCGAACATTTTCGCGCAGATGAGAAAGGAG
FROG 2354 -----
TROUT 800 -----
DANIO 2388 -----
MOUSE 2436 -----
RAT 3166 -----
HOMO 2381 -----
PIG 425 -----
COW 316 -----
3781 3781.....3790.....3800.....3810.....3820.....3830.....

FLOWER 2448 -----TGACTCT-----
SOY 561 -----
FLY 2579 -----
CELEGANS 2182 AGTATGGCCACTGGATCTGTTGCCATCACTGTTTCGACACGTTGAATCTATGATTCGTTTG
FROG 2354 -----
TROUT 800 -----
DANIO 2388 -----
MOUSE 2436 -----
RAT 3166 -----
HOMO 2381 -----
PIG 425 -----
COW 316 -----
3841 3841.....3850.....3860.....3870.....3880.....3890.....

FLOWER 2455 -----
SOY 561 -----
FLY 2579 -----
CELEGANS 2242 TCGGAAGCTCACGCGAAACTTCATCTTAGATCATACGTGAACGACGAAGACTGTGCCGCA
FROG 2354 -----
TROUT 800 -----
DANIO 2388 -----
MOUSE 2436 -----
RAT 3166 -----
HOMO 2381 -----
PIG 425 -----
COW 316 -----
3901 3901.....3910.....3920.....3930.....3940.....3950.....

FLOWER 2455 -----TT**CATATCA**ACC**CGAAATTTGGTGTC**-----
SOY 561 -----
FLY 2579 -----TGATGTTGGAGAGCTT**TATCGAGGCGCAGAAAGTTCA**-----GCGTT
CELEGANS 2302 GCGATT**CGTGT**CATGTT**GGAATCGTTTGTGAACACCCAAAAGCCTCAATCATGCGTATG**
FROG 2354 -----AGGTTATGTTAGAGAGT**TT**CATCGATACACAGAAATTCAGTGT**TATGAGGAGC**
TROUT 800 -----
DANIO 2388 -----CGCGT**CATGCTAGAGAGCTT**CATCGACACGCAGAAAGTT**CAGTGTGATGAGGAGC**
MOUSE 2436 -----CGAGT**GATGATGGAGAGCTT**CATTGACACCCAGAAAGTT**CAGCGTCATGCGGAGT**
RAT 3166 -----CGCGT**GATGCTGGAGAGCTT**CATTGACACCCAAAAGTT**CAGTGT**CATGCGCAGC
HOMO 2381 -----CGCGT**GATGCTGGAGAGCTT**CATAGACACACAGAAAGTT**CAGCGTCAT**-CGCAGC
PIG 425 -----CGCGT**GATGCTGGAGAGCTT**CGTGGATACACAGAAAGTT**CAGCGTCATGCGCAGT**
COW 316 -----CGCGT**GATGCTCGAGAGCTT**CGTGGACACTCAGAAAGTT**CAGCGTCATGCGTGCC**
3961 3961.....3970.....3980.....3990.....4000.....4010.....

FLOWER 2482 -----CAGAGAA-----
SOY 561 -----
FLY 2620 ATGAAGAAGA-----
CELEGANS 2362 ATGAAGAAGACATTCTCTCGT**CATTGACAGAGAATCGTTCGGCTAACGAGCTTCTCCTC**
FROG 2408 ATGAGAAAACGTTTGCTCG-----
TROUT 800 -----
DANIO 2442 ATGAGAAAGACGTT**TCGCACG**-----
MOUSE 2490 ATGCGCAAGACTTT**TGCCCCG**-----
RAT 3220 ATGCGCAAGACTTT**TGCCCCG**-----
HOMO 2434 ATGCGCAAGACTTT**TGCCCCG**-----
PIG 479 ATGCGGAAGACCT**TCGCCCCG**-----
COW 370 ATGCGGAAGACATT**TCGCCCCG**-----
4021 4021.....4030.....4040.....4050.....4060.....4070.....

FLOWER 2489 -----CTCTAAGAGAGAGTT-----
SOY 561 -----
FLY 2630 -----TGCG-----
CELEGANS 2422 TTCATTCTCAAGCAACTGATCCGTCAACAAATGCACTATGCTACAGCTCGTGC**GGCTGCT**
FROG 2428 -----
TROUT 800 -----
DANIO 2462 -----
MOUSE 2510 -----
RAT 3240 -----
HOMO 2454 -----
PIG 499 -----
COW 390 -----
4081 4081.....4090.....4100.....4110.....4120.....4130.....

FLOWER 2504 -----TCAAACGGT-----ACATTACATACAAAAAGGACTTCAA
SOY 561 -----
FLY 2634 -----CAGCA-----CATTCCAGAAGTACCTGTCTTCCAAAAGGACCATTCC
CELEGANS 2482 GGCACCATTCTTCAATCGGTCAGATTCCAGA-----
FROG 2428 -----TTACCTGGCATT**CAGAAGAGACAACAA**
TROUT 800 -----
DANIO 2462 -----GTATCTGGCCTT**CAGACGAGACAACAA**
MOUSE 2510 -----GTATCTCTCCTTCCGGCGAGATAACAA
RAT 3240 -----GTATCTCTCCTTCCGGTGGGATAACAA
HOMO 2454 -----CTACCTTT**CATTCGGCGTGACAACAA**
PIG 499 -----CTACCTGTCTTCCGGCGGGACAACAA
COW 390 -----CTACCTGT**CGTTCGGCGGGACAACAA**
4141 4141.....4150.....4160.....4170.....4180.....4190.....

FLOWER 2538 CTCATTGCTGCTCGTTCTTCTCAAAGAGCTCGTAAAGAACGCCTTGAAGTTTGAA-GAAA
SOY 561 -----
FLY 2676 CGAGCTGCTGTTTCTTTATTCTGCGACAGCTGACGCTCGACCAGCTCGCCTA-----CAT
CELEGANS 2514 -----
FROG 2455 TGAACCTTCTGCTGTTTGTGCTAAAACAACCTGATAGCTGAACAAGTGACTTATCAGAGAAA
TROUT 800 -----
DANIO 2489 CGAGCTGCTACTGTTTCATCCTTAAGCAGCTGGTTTCTGAGCAGGTCTCATATCAGCGCAA
MOUSE 2537 TGATCTGCTGCTCTTCATACTGAAGCAGTTGGTGGCTGAGCAGGTGACATATCAACGCAA
RAT 3267 TGACCTGCTGCTCTTCATACTGAAGCAGTTGGTGGCTGAGCAGGTGACATACCAACGTAA
HOMO 2481 TGAGCTGTTGCTCTTCATACTGAAGCAGTTAGTGGCAGAGCAGGTGACATATCAGCGCAA
PIG 526 TGAGCTATTGCTCTTCATCCTG-----
COW 417 TGAGTTGCTGCTGTTTCATCCTGAAGCAGCTGGTGGCCGAGCAGGTGACGTATCAGCGCAA
4201 4201.....4210.....4220.....4230.....4240.....4250.....

FLOWER 2597 TCATTT-----CAGGATCGAACTCAGGAC----TACCTACAATCGAGGTTAAGAT
SOY 561 -----
FLY 2730 TCGCTGCAAGGACGGGCCTGGCGCCACACATGTGGAGATTATGGAGCGGGATTTGATCGA
CELEGANS 2514 -----GTCGGAATTCATCGA
FROG 2515 TCGCTATGGGGCACAGCAGGATACTA-----TAGAAGTGCCAGAAAAGGATCTAGTCGA
TROUT 800 -----
DANIO 2549 CCGTTACGGAGCCCAGCAGGACACCA-----TCGAGATCGCAGAGAAAGACCTGGTGGAA
MOUSE 2597 CCGCTTTGGGGCCCAGCAGGACACCA-----TTGAAATACCTGAGAAGGATCTGATGGAA
RAT 3327 CCGCTTTGGGGCCCAACAGGACACCA-----TCGAAATACCTGAGAAGGACCTGATGGAA
HOMO 2541 CCGCTTTGGGGCCCAGCAGGACACTA-----TTGAGTCCCTGAGAAGGACTTGGTGGAA
PIG -----
COW 477 CCGCTTCGGGGCCCAGCAGGACACGA-----TCGAGGTTCCCGAGAAGGACTTGGTGGAA
4261 4261.....4270.....4280.....4290.....4300.....4310.....

FLOWER 2643 AGAGGAACTGCAGACAAA-----GGCC-----
SOY 561 -----
FLY 2790 ACGGGCTAAGCAGCTGGATATTGTAACCTGAAGCCGTTCTAC-----G
CELEGANS 2529 AAAGGCTCAGCAATTGAGAATTGAGAATGTCAAGCCGTTCTAC-----A
FROG 2569 TAAGGCTCGCCAGATAAACATCCACAACCTCTCGGCCTTTTACGACAGCGATTTATTCAA
TROUT 800 -----
DANIO 2603 CAAGGCTCGACAGATCAACATCCACAGCCTGTGACGCTTTTACGACAGCGATCTCTTCCG
MOUSE 2651 CAAGGCCAGGCAGATCAATATCCACAACCTCTCTGCCTTCTACGACAGCGACCTCTTCAA
RAT 3381 CAAGGCCAGGCAGATCAATATCCACAACCTGTCCGCTTCTACGACAGCGACCTCTTCAA
HOMO 2595 TAAGGCTCGTCAGATCAACATCCACAACCTCTCTGCATTTTATGACAGTGAGCTCTTCAG
PIG -----
COW 531 CAAGGCCCGGCAGATCAACATCCACAACCTGTCCGCTTCT-----
4321 4321.....4330.....4340.....4350.....4360.....4370.....

FLOWER 2665 -----AAGGAA-----TACGACATTGCAGATCTAC
SOY 561 -----
FLY 2834 AATCAGATC-----TGTT---TCG
CELEGANS 2573 CTTGCGAAA-----TCTTCGCTTC
FROG 2629 GATGAACAAGTTCACACATGATGTGAAGAAGAACTGATTATTCAGCAATTCTGAACCCA
TROUT 800 -----
DANIO 2663 CTCAAACAATTTCTCCACGATGTCAAGAAGAACTCATCGTTTCAGCAGTTCT-AGCCTG
MOUSE 2711 ATTCAACAAGTTCAGCCGTGACCTGAAACGCAAAGCTGATCCTACAGCAGTTCTGAGACCA
RAT 3441 AATCAACAAGTTCAGCCGTGACCTGAAACGCAAAGCTGATCCTACAGCAGTTCTGA-----
HOMO 2655 GATGAACAAGTTCAGCCACGACCTGAAAGGAAATGATCCTGCAGCAGTTCTGAGGCC-
PIG -----
COW 572 -----
4381 4381.....4390.....4400.....4410.....4420.....4430.....

FLOWER 2690 GACCCTTCTTTTCAAGCACAGATTT-----
SOY 561 -----
FLY 2850 CACAAATGGCTTCTCTTAC-----GATCCAAGCGACGC--ATCATCCT-----
CELEGANS 2592 CAACAATTTCTCT-----ATGATCCA-----
FROG 2689 GAAGAATAG-----GTGAAAGGAATCTACT-----GCCTTTAGTCT
TROUT 800 -----
DANIO 2722 CATCTGGAGTCTCCCGGACTTGTATATAATTTGTCATGTGGTCGTTGGACCAGTCGTTT
MOUSE 2771 GCACAGGGGCCTCTATGTC-TGAATGAGGCTCGGTCACCACGCTGA---GCC-TAGTCA
RAT -----
HOMO 2714 -----CTATGCCATCCATAAGGATTCCTTGGGATTCTGGTTTGGG-GTGGTCA
PIG -----
COW 572 -----
4441 4441.....4450.....4460.....4470.....4480.....4490.....

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FLOWER 2715 -TTCCAA-----AGCTCACTTCGAGTT-----
SOY 561 -----
FLY 2892 --TCAAATTGTGGTCGACGGCAACACA-----
CELEGANS 2614 --TCGAA-----GAAGAC-----
FROG 2725 GTTCC-----AGCCTTCTTCATGAAATGATTCAAGCCAAG
TROUT 800 -----
DANIO 2782 GT-----TAAACATGGATTCCACATTTTGACCCATTCATGAACT--TGCTACCGTAT
MOUSE 2826 CTTCCCACT-TCCACTGGGG-----CTTGGTGCCCT-----GTAG
RAT -----
HOMO 2761 GTGCCCTCTGTGCTTTATGGACACAAAACCAGAGCACTTGATGAAC-----TCG
PIG -----
COW 572 -----
4501 4501.....4510.....4520.....4530.....4540.....4550.....

FLOWER 2736 -----GGATCATGGCCGA-----GGAATGATCAAGTGTC
SOY 561 -----
FLY 2917 -----GCTTAA-----GTT
CELEGANS 2625 -----
FROG 2760 GGATG-----TACATCAGAAT-----TA
TROUT 800 -----
DANIO 2832 AGATC-----TGCCTGGCT-CTCGTGGTTTTGTTGACTGTA
MOUSE 2860 GGGTGGGAGGAT--GGCTTAATGCAG-----
RAT -----
HOMO 2810 GGGTACTAGGGTCAGGGCTTATAGCAGGATGTCTGGCTGCACCTGGCATGACTGTTTGT
PIG -----
COW 572 -----
4561 4561.....4570.....4580.....4590.....4600.....4610.....

FLOWER 2765 -----C
SOY 561 -----
FLY 2926 TC----AGCCA--TTACTTCATCTCA-----TTAGT-----
CELEGANS 2625 -----
FROG 2778 GCCAAATTCCTTTTTTGTCTTTTTTTCACCTTTATACCAGTAATTGCCATTTATGGCAGAA
TROUT 800 -----
DANIO 2867 TCT-----TGCATTG-T--TTCT-----
MOUSE 2884 -----ACCTT--TACCTGTGAGCCCC--TAGGCC----
RAT -----
HOMO 2870 TCTCCAAGCCTGCTTTG-TGCTTCTCACCTT--TGGGTGGGATGCCT--T--GCC----
PIG -----
COW 572 -----
4621 4621.....4630.....4640.....4650.....4660.....4670.....

FLOWER 2766 AAAAAGGCTGA-----
SOY 561 -----
FLY 2953 -----TATAGTATTCATGTTTTGTTACCCCA-----
CELEGANS 2625 -----TATTGTTCAAGAGA-----
FROG 2838 AAAAAGTTTGAGGAATTGAAATAATGTAAAGGACAGAGTTTGATTTTGTTCCTGT-----
TROUT 800 -----
DANIO 2882 -----GCTGTCAAATTAATTGAATGTTGTA-----
MOUSE 2909 ---AAGGCTGTAGCATTAAATGACTATTTATTC-----TTCTGCCCCCC
RAT -----
HOMO 2918 ---AGTG---TGTCTTACTTGGTTGCTGAACA-----TCTTGCCACCT
PIG -----
COW 572 -----
4681 4681.....4690.....4700.....4710.....4720.....4730.....

FLOWER 2777 -----
SOY 561 -----
FLY 2980 -----TTTTCGGTCTAA-----
CELEGANS 2639 -----TTTTC-----
FROG 2893 -----GCCCTTTTTGCTCTCACAGGCTGCCATGTGATTATCTGCTGCAGTGATCA----
TROUT 800 -----
DANIO 2907 -----
MOUSE 2950 TCTAGAGCACTCTTCTTGGCCAGACCCTCTGTCCAAG-----GCTCATTAGA----AG
RAT -----
HOMO 2955 CCGAGTGCTTTGTCTCCACTCAGTACCTTGGATCAGA-----GCTGCTGAGTTCAGGAT
PIG -----
COW 572 -----
4741 4741.....4750.....4760.....4770.....4780.....4790.....

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FLOWER 2777 -----
SOY 561 -----
FLY 2992 -----TAAAGTTTGATATACTT-----
CELEGANS 2644 -----
FROG 2943 --CTGAATGAGTTTGTGGCTGGACAGAGTTTCACTGAGACTGTTACGAT-----TGCAC
TROUT 800 -----
DANIO 2907 -----
MOUSE 2999 GCTGGGGTTGTGTTTCAGG--TGACAGACTTTATCAA-----AACTATTGCTG
RAT -----
HOMO 3009 GCCTGCGTGTGGTTTAGG--TGTTAGCCTTCTTACATGGATGTCAGGAGAGCTGCTGCC
PIG -----
COW 572 -----
4801 4801.....4810.....4820.....4830.....4840.....4850.....

FLOWER 2777 -----
SOY 561 -----
FLY 3009 -----
CELEGANS 2644 -----
FROG 2995 AATTTACAAGATGCATCACTTGTGCA--CAGA-----TCGTCACCATGAGACTTCTA
TROUT 800 -----
DANIO 2907 -----
MOUSE 3044 TTTT-----GGCATGAGTTGTGTTTCTGGACTGTTTTGTTTTCCCTTTAGACAAAGA
RAT -----
HOMO 3067 TCTT-----GGCGTGAGTTGCGTATTCAGGCTGCTT--TTGCTCGCTTTGGCCAGAGA
PIG -----
COW 572 -----
4861 4861.....4870.....4880.....4890.....4900.....4910.....

FLOWER 2777 -----
SOY 561 -----
FLY 3009 -----
CELEGANS 2644 -----
FROG 3045 AAGATTTAACTCTTTTTTGTGCATAACGTATCTGGAAACAAGGCAATCCAGTGTAATTGTAT
TROUT 800 -----
DANIO 2907 --AAAAAAAAAATATGTG--AGAACTTTT-----
MOUSE 3097 GCAACTTAGAAGTATTTG--CAAACCTTTT-----CAA-----AACATTCT
RAT -----
HOMO 3118 GCTGGTTGAAGATGTTT--TAATCGTTTT-----CAGTCTCCTGCAGGTTTCT
PIG -----
COW 572 -----
4921 4921.....4930.....4940.....4950.....4960.....4970.....

FLOWER 2777 -----
SOY 561 -----
FLY 3009 -----
CELEGANS 2644 -----
FROG 3105 GAAAATATTT-----ACACCTTTTGCCTGTGGAGCT-----
TROUT 800 -----
DANIO 2932 -----
MOUSE 3136 CAAAGCCTGTGATGGAGGAGCACAAGACCC---TGTCTGCTGAGGGCCCATG-CTCCTC
RAT -----
HOMO 3165 GTGCCCTGTGGTGAAGAG-GCACGACAG---TGCCAGCGCAGCGTTCTGGGCTCCTC
PIG -----
COW 572 -----
4981 4981.....4990.....5000.....5010.....5020.....5030.....

FLOWER 2777 -----
SOY 561 -----
FLY 3009 -----
CELEGANS 2644 -----
FROG 3136 -----GAAAGCGTGTATGG-----TCTACGT
TROUT 800 -----
DANIO 2932 -----TGTACTGTTTGT-----CAGAGTAATAAAC-T
MOUSE 3191 -----TCATGGGTTTCTTCCCACCTAGCCAGTGCCTTCATT-T
RAT -----
HOMO 3220 AGTCGCAGGGGTGGGATGTGAGTCATGCGGATTATCC--ACTCGCCACAGTTATCAGC-T
PIG -----
COW 572 -----
5041 5041.....5050.....5060.....5070.....5080.....5090.....

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FLOWER 2777 -----
SOY 561 -----
FLY 3009 -----
CELEGANS 2644 -----
FROG 3158 GACAATG-TCCATTGGTGTTT-----TTGTATATTAGTGCATGTTTGATTC
TROUT 800 -----
DANIO 2959 GA-----AGCTGT-----GTGTGTGTGATGG
MOUSE 3228 GC-----TTGTTGTACA-----GTTTCTTG
RAT -----
HOMO 3277 GCCATTGCTCCCTGTCTGTTTCCCACTCTCTTATTTGTGCATTTCG-GTTTGGTTTCTGT
PIG -----
COW 572 -----
5101 5101.....5110.....5120.....5130.....5140.....5150.....

FLOWER 2777 -----TCACTTGGTA-----
SOY 561 -----A-----
FLY 3009 --ATGTATGTATTTATACTAAAATA-----
CELEGANS 2644 -----TA-----
FROG 3203 CAATGTAATTTTTTCTACTGAAATACAAGTGATTTACTTGCTAAAAAAAAAAAAAAAAAAAA
TROUT 800 -----
DANIO 2980 AA-----AAAAAA-----AAAAAAAAAAAA
MOUSE 3248 TAGTTTATTTTTT-----AATAGATTTG-----AATAAACCTAA
RAT -----
HOMO 3336 AGTTTTAATTTTT-----AATAAAGTTG-----AATAAATATAA
PIG -----
COW 572 -----
5161 5161.....5170.....5180.....5190.....5200.....5210.....

FLOWER 2787 -----A
SOY 562 -----G
FLY 3032 -----G
CELEGANS 2646 -----A
FROG 3263 AAAAAAAAAA
TROUT 800 -----C
DANIO 2999 AAAAAAAAAA
MOUSE 3283 ATAGCGC-T
RAT -----
HOMO 3371 AAAAAAAAAA
PIG -----
COW 572 -----A
5221 5221.....

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