

FROG 1 TTT-----TTTTTTTTTTTTGGGTCTA
FLOWER 1 CT-----
SOY 1 CTC-----TCCCTCTCTGTTTCGCACTC
HOMO 1 G-----
PIG 1 -----
COW 1 GT-----
MOUSE 1 -----CAGCGGAC-GCTTCCCAGATCTCGGCTCTA
RAT 1 TTTTTTTTAGGAGCCCGCGCCTCGGTTTCAGCGGAC-GCTTCCCCTGATCTCCGTTCTA
TROUT 1 TAAC-----
DANIO 1 AGACTCGTGCTCGCTCCCAGTCTGTGCTTCAGCCGACAGCAGCAGCAG-----CAA
CELEGANS 1 AT-----GAGCGTTTCCAAGAAGCTTTTCTCTA
1 1.....10.....20.....30.....40.....50.....

FROG 23 TA-----GTAATTTTATTGGAACAGAGAAA-----
FLOWER 3 -GATTTTTTGACGTTAAGAGATAGAAACAGAGAGAGATAGAGAGATAGAGTTATGGCTT-
SOY 23 TGTCTTTCCCCTGTT-----TCCGCGTCACTGAGTCATGGC--
HOMO 2 -----
PIG 1 -----ACCCACTGCTCTCTTG
COW 3 -----ACCCACTGCCTGCCTG
MOUSE 31 CCAC-----CATCCACTGCCGTCTTA
RAT 60 CCAC-----CATCCACTGCCGTCTTA
TROUT 5 -----
DANIO 52 GCAG-----CAGCGATGGCTCTCCTC
CELEGANS 29 CC-----
61 61.....70.....80.....90.....100.....110.....

FROG 48 -----
FLOWER 61 -----TGGCGATGATGA-----TCCGAAAC-----
SOY 59 -----GA-----TTCGCAACTCGCTCACCGGCCAATTC
HOMO 2 --GTCCACCATGGCCCTGCTGCACTCCGGCCGCGTCTCCCCGGGATCGCCGCCGCTTC
PIG 17 CCGCCCACCATGGCCCTGCTGCACTCCGGCCGCGTCTGTCCGGAGTCGCCTCCGCCTTC
COW 19 CCGCCCACCATGGCCCTGCTGCACTCTGGCCGCTTCTGTCCGGAGTCGCCCGGCTTTT
MOUSE 52 CCGCCCACCATGGCCCTCCTGCACTCCAGCCGATCCTCTCCGGGATGGCTGCTGCCTTT
RAT 81 CCACCCACCATGGCCCTCCTGCACTCCGGTCCGCTCTCTCCGGGATGGCTGCTGCCTTT
TROUT 5 -----
DANIO 73 AAAACCACCAAGTTCAT-----CTCTTCTGTTGGGAGTTTGACTC-----
CELEGANS 31 -----GCCGTGC-----
121 121.....130.....140.....150.....160.....170.....

FROG 48 CCAG-----GCGGCAG-----
FLOWER 81 -----GCAGCTTCGAAGCGAGGAATGACTCCGATCTCCGGTCATTTT
SOY 87 CTCC-----GCCGCAGCTCCGTCGC-----CGGAGCAAGGCTCATGTC
HOMO 60 CACCCGGGCCTCGCCGCCGCGGC-----CT--CTGC-----
PIG 77 CACCCAGGCCTCGCTGCTGCAGC-----AT--CTGC-----
COW 79 CACCCAGGCCTCGCTGCCGCGC-----TT--CTGC-----
MOUSE 112 CACCCAGGCCTAGCTGCTGCAGC-----CT--CTGC-----
RAT 141 CACCCAGGCCTTGCAAGCCGAGC-----CT--CTGC-----
TROUT 5 -----
DANIO 113 -----CTTCGTTGGC-TAGC-----CTACCTAT-----
CELEGANS 38 -----
181 181.....190.....200.....210.....220.....230.....

FROG 59 -----TACGCTACATGATT-----AGAGCAG
FLOWER 123 GGTGGTTTGAGATCTATGCTTCATGGTGGAAAGAGCGTTGAGCCTGCTCCTAAAGATCCG
SOY 125 -----TCTTCGTCCTCATGGTTCCGGAGCATCGAGCCCGCTCCCAAGGATCCT
HOMO 89 -----CAGAGCCAGCTCCTGGTGGACCCA---TGTGGAATGGGACCTCCAGATCCC
PIG 106 -----CAGAGCCAGCTCCTGGTGGGCTCA---TGTGAGATGGGGCCCCAGATCCC
COW 108 -----CAGAGCCAGCTCCTGGTGGGCTCA---TGTGAGATGGGGCCCCAGATCCC
MOUSE 141 -----CAGAGCCAGCTCCTGGTGGACCCA---TGTGGAATGGGACCTCCAGATCCC
RAT 170 -----CAGAGCCAGCTCCTGGTGGACCCA---TGTGGAATGGGACCTCCAGATCCC
TROUT 5 -----
DANIO 135 -----TAGAGCCAGCTCATGGTGGACTGA---GGTGCAGATGGGACCCCTGATCCC
CELEGANS 38 -----GAGGAAAGTCGTGGTGGTCCGA---TGTGAGATGGGACCTCCAGATGCG
241 241.....250.....260.....270.....280.....290.....

FROG 81 ATGGTGGTTATC-----TTTCC-----CAA
FLOWER 183 ATCCTCGGAGTTACCGAAGCTTTTCTCGCTGATCCTAGTCCTGAA-----AAAGTTAA
SOY 174 ATCCTCGGAGTCACTGAAGCTTTCTCGCCGATCAGAGTCCAAAC-----AAAGTCAA
HOMO 138 ATTCTGGGAGTCACTGAAGCCTTT-----AAGAGGGACACCAATAGCAAAAAGATGAA
PIG 155 ATCCTGGGAGTCAAGAACGCTTT-----AAGAGAGACACCAACAGCAAAAAGATGAA
COW 157 ATCCTGGGAGTAACAGAAGCCTTT-----AAGAGAGACACCAACAGCAAAAAGATGAA
MOUSE 190 ATCCTGGGCGTTACCGAAGCCTTC-----AAGAGAGATACCAACAGCAAGAAGATGAA
RAT 219 ATCCTGGGAGTGACCGAAGCCTTC-----AAGAGAGATACCAACAGCAAGAAGATGAA
TROUT 5 -----
DANIO 184 ATCCTGGGGGTGACTGAGGCCTTC-----AAAAGGGACACAAACTCAAAGAAAATGAA
CELEGANS 85 ATTCTTGGAGTCAACGAGGCCTTC-----AAAGCCGATTCAAACCCAAAGAAGATCAA
301 301.....310.....320.....330.....340.....350.....

FROG 101 GGGCGGAGTCTGAGCCG-----
FLOWER 236 TGTGGTGTGGGAGCATATCGTGATGATAATGGGAAG-CCTGTTGTCTTGGAATGTGTCA
SOY 227 CGTGGGAGTGGGTGCGTATCGCGATGACCAACGGAAA-CCTGTGTTTGGGAATGTGTTA
HOMO 191 TCTGGGAGTTGGTGCCTACCGGGATGA-TAATGGAAAGCCTTACGTTCTGCCTAGCGTCC
PIG 208 TCTGGGAGTTGGTGCCTACCGGGATGA-TAACGGAAAGCCTTACGTGCTCCCTAGTGTCC
COW 210 CCTGGGAGTTGGTGCCTACCGGGATGA-TAATGGAAAGCCTTACGTGCTTCCAAGTGTCC
MOUSE 243 CCTGGGAGTTGGTGCCTACCGGGATGA-TAACGGAAACCTTACGTGCTCCCCAGTGTCC
RAT 272 CCTGGGAGTTGGTGCCTACCGGGACGA-TAACGGAAAGCCTTACGTGCTCCCCAGTGTTC
TROUT 5 -----
DANIO 237 CCTTGGTGTGGGGGCATACAGGGATGA-CAATGGCAAGCCATACGTTCTCAACTGTGTCC
CELEGANS 138 CCTTGGAGTCGGAGCTTACCGTGACGA-TCAAGGAAAGCCATTTGTTCTCCCATCGGTCA
361 361.....370.....380.....390.....400.....410.....

FROG 118 -----GGCTGGCAGCACACAAACCCAG-AGTATCTCCTTCTG----
FLOWER 295 GAGAAGCTGAGA---AAAGGCTTGCTGGGAGCACTTTCATGGAGTACCTTCTATGGGAG
SOY 286 GAGAAGCAGAGA---GGAGGTTGCGGGAAGTCAATTCATGGAGTATCTTCCCATGGGTG
HOMO 250 GCAAGGCAGAGGCCCA---GATTGCCG-----
PIG 267 GAAAGGCAGAGGCCGA---GATTGCTG-----
COW 269 GGAAGGCGGAGGCCCA---GATTGCTG-----
MOUSE 302 GGAAGGCAGAGGCCCA---GATTGCTG-----
RAT 331 GGAAGGCAGAGGCCCA---GATTGCTG-----
TROUT 5 -----
DANIO 296 GCAAGGCTGAATCTCT---GATTGCCCT-----
CELEGANS 197 AGGAAGCTGAACGTCAGTGATCGCTG-----
421 421.....430.....440.....450.....460.....470.....

FROG 155 -----ATCCTACCCTGCACGTCTGACTCATGTGAAGAGA-CAGGCTG
FLOWER 352 GAAGTGCCAAAATGGTGGACCTAACATTGAAGCT----TGCCTATGGGACAATAGTGAA
SOY 343 GAAGCATAAAAATGATAGAAGAATCGCTGAAGCT----GGCATTTGGAGACAACCTCTGAG
HOMO 274 -----CAAAA-----ATTGGA-----
PIG 291 -----CAAAA-----ATTGGA-----
COW 293 -----CAAAA-----ATTGGA-----
MOUSE 326 -----CAAAA-----ATTGGA-----
RAT 355 -----GAAAA-----ATTGGA-----
TROUT 5 -----
DANIO 320 -----CTAAGG-----CGCTGGA-----
CELEGANS 224 -----C-----CA-----ATCTTGA-----
481 481.....490.....500.....510.....520.....530.....

FROG 196 TGCAGCCAGGATGGATGAAGAGGTCC-----
FLOWER 408 TTTATCAAAGATAAAAGAATTGCTGC-----
SOY 399 TTCATCAAGGATAAAAGAATAGCTGC-----
HOMO 287 -----CAAGGAATACCTGCCATTGGGGACTGGCTGAATTTTGAAGGCATC
PIG 304 -----CAAAGAATACCTGCCATTGGAGACTGGCGGAATTTTGAAGGCATC
COW 306 -----TAAAGAATACCTGCCATTGGGGGCTGGCTGAATTTTGAAGGCATC
MOUSE 339 -----CAAAGAATACCTGCCATTGGGGACTGGCTGAATTTCTGTAAGGCTTC
RAT 368 -----CAAAGAATACCTACCCATCGGGGACTGGCTGATTTTTGTAAGGCTTC
TROUT 5 -----
DANIO 333 -----TAAAGAGTATCTAGGCATTGTGGGTCTGGGGATTTCAATAAGGCTTG
CELEGANS 234 -----TAAGGAGTACGCCGAATTTGGACTTCCCGAGTTCACCAAGCTCTC
541 541.....550.....560.....570.....580.....590.....

FROG 222 -----AG-
FLOWER 434 -----AGT
SOY 425 -----AGT
HOMO 335 TGCAGAACTAGCCCTGGGTGAGAACAGCGAAGTCTTGAAGAGTGGCCGGTTTGTCACTGT
PIG 352 TGCAGAACTAGCCCTGGGTGAGAACAAATGAGGTGTTGAAAAGTGGCCGGTATGTCACCGT
COW 354 TGCAGAACTAGCCCTGGGTGAGAACAAATGAAGTGTGAAAAGTGGCCGGTATGTCACCGT
MOUSE 387 TGCAGAACTGGCCCTGGGCGAGAACAAATGAAGTGTGAAAAGCGGCCGGTTTCGTCACTGT
RAT 416 TGCAGAACTGGCCCTGGGCGAGAACAGCGAAGTGTGAAAAGCGGCCGGTTTGTAACTGT
TROUT 5 -----
DANIO 381 TGCTGAGCTTGCACTGGGGCAGGACAGTGACGTTCTCAAAGCAAGAGGAGCATTACTGT
CELEGANS 282 TGCTCAACTCGCTCTTGAGAGAACTCTGATGTGATCAAGAACAAGAGAATCTTCACCAC
601 601.....610.....620.....630.....640.....650.....

FROG 224 -----CTGGGCAGAGGCC-----
FLOWER 437 TCAGACTCTGTCTGGCACTGGAGCCTGCCGGCTCTTTGCAGACTTCCAGAAACGTTTT--
SOY 428 GCAGGCTTTATCTGGGACTGGTGCATGTCGACTTTTTGCTGCATTTCAACAGAGATTT--
HOMO 395 GCAGACCATTTCTGGAACGGAGCCTTAAGGATCGGAGCCAGTTTTCTGCAAAGATTTTT
PIG 412 GCAGACCATTTCTGGGACCGGGCCCTGCCGGATCGGAGCCAATTTCTGCAAAGATTTTT
COW 414 GCAGACCATTTCTGGAACCGGGCCCTTAAGGATCGGAGCCAGTTTTCTGCAAAGATTTTT
MOUSE 447 GCAGACCATTTCCGGGACTGGAGCCTTAAGGATCGGGCCAGTTTTCTGCAAAGGTTTTT
RAT 476 GCAGACCATTTCCGGGACTGGAGCCTTGAGGATCGGAGCCAGCTTCTGCAAAGATTTTT
TROUT 5 -----
DANIO 441 CCAGACAATCTCAGGCACTGGTTCTTTGAGGTTGGAGCCAATTTCTGTGCACGCTTCCA
CELEGANS 342 TCAGAGCATTTCTGGAACGGAGCCTTAGAATCGGATCTGAGTTCC-----TTTC
661 661.....670.....680.....690.....700.....710.....

FROG 238 -----CATCCCAGTAGGA-----GCCAATCA--
FLOWER 495 -----TCTCCTGGTTACAG-----TCTACATTCTGTTCCAACCTGGTCCAACCACC
SOY 486 -----CATCCTAATACCCAAA-----TCTATATACCAGTGCCTACCTGGGCCAACACC
HOMO 455 TAAGTTCAGCC---GAGA-----TGTCTTTCTGCCCAAACCAACCTGGGGAAACCACA
PIG 472 TAAGTTCAGCC---GAGA-----TGTCTTCTGCCCAAACCAACCTGGGGAAATCACA
COW 474 TAAGTTCAGCC---GGGA-----TGTCTTCTGCCCAAACCAACCTGGGGAAATCATA
MOUSE 507 TAAGTTCAGCC---GAGA-----TGTCTTCTGCCCAAACCAACCTGGGGAAATCACA
RAT 536 TAAGTTCAGCC---GAGA-----TGTCTTCTGCCCAAACCAACCTGGGGAAACCACA
TROUT 5 -----
DANIO 501 CACAGTTGCGA---GGGA-----TGTGTACTTGCCGAAGCCATCCTGGGGAAATCACA
CELEGANS 393 TAAGTAC-GCC---AAGACCAAGGTTATCTACCAGCCAACACCAACTTGGGGAAACCATG
721 721.....730.....740.....750.....760.....770.....

FROG 259 -----ATCAATGACTGAAGAGG-----ACTCTGAAA
FLOWER 544 ACAACATCTGGAAAGATGCACAAGTCCCTCAAAGACATATCATTACTATCATCCAGAAA
SOY 535 ATAACATTTGGAGAGATGCTGGAGTGCCTATGAAGACATTCGGTTACTATCACCCCTGAGT
HOMO 505 CACCCATCTTCAGGGATGCTGGCATGCAGCTACAAGGTTATCGGTATTATGACCCCAAGA
PIG 522 CCCCATCTTCAGGGACGCTGGCATGCAGCTGCATAGTTACCGTACTATGACCCCAAGA
COW 524 CACCCATCTTCAGGGATGCTGGCATGCAGCTCCAGAGTTATCGGTACTATGACCCCAAGA
MOUSE 557 CGCCCATCTTCAGGGATGCGGCATGCAGCTCCAAGGTTATCGCTACTATGACCCCAAGA
RAT 586 CGCCCATCTTCAGGGATGCGGCATGCAGCTGCAAGGTTATCGATACTATGACCCCAAGA
TROUT 5 -----
DANIO 551 CACCTATTTTCCGTGATGCTGGTATGCAACTGAAAGCGTACCGCTACTATGATCCTGCTA
CELEGANS 449 TTCCAATCTTCAAATTTGCCGGAGTCGATGTCAAGCAATACCGCTATTATGACAAGTCCA
781 781.....790.....800.....810.....820.....830.....

FROG 285 TCAAGGGC-----AGGGTCTC
FLOWER 604 CCAAGGGCTTGGATTTTCTCAGCATTGATGGATGATGTGAAGAATGCTCCGGAAGGGTCAT
SOY 595 CTAGAGGATTGGATTTTTTCAGGACTGATGGATGACATAAAGAATGCTCCAGATGGTTCCCT
HOMO 565 CTTGCGGTTTTGACTTTCACAGGCGTGTGGAGGATATTTCAAAAATACCAGAGCAGAGTG
PIG 582 CTTGCGGCTTTGACTTTCACAGGCTCTTTGAGGACATTTCAAAAATACCAGCTCAGAGTG
COW 584 CGTGCGGCTTTGACTTTCACAGGCGTATTGAGGACATTTCAAAAATACCAGCGCAGAGTG
MOUSE 617 CTTGCGGTTTTGACTTCTCCGGAGCCCTAGAAGACATATCAAAAATCCCAGAGCAGAGTG
RAT 646 CTTGCGGCTTTGACTTCTCTGGAGCCTTAGAAGACATATCAAAAATCCCAGAGCAGAGTG
TROUT 5 -----
DANIO 611 CTTGTGGCTTTGACTTCACTGGAGCGCTTGATGACATCTCTAAAATTTCCACAGAATAGTG
CELEGANS 509 CCTGTGGTTTTGATGAAACTGGAGCACTCGCTGACATGCTCAAATCCCAGAGGATCCA
841 841.....850.....860.....870.....880.....890.....

FROG 301 TCTCTCTCC-----ACGGCTCTT-----T
FLOWER 664 TCTTCTTCTTTCATGCTTGTGCTCATAATCCTACTGGAGTAGACCCTACAGAGGAACAAT
SOY 655 TCTTTCTGCTTGTGCTTACTGCTCATAATCCTACTGGAGTAGATCCTTCAGAAGAACAAAT
HOMO 625 TTCTTCTTCTGCATGCCTGCGCCACAATCCCACGGGAGTGGACCCGCGTCCGGAACAGT
PIG 642 TAATTCTCCTGCACGCCTGTGCCACAATCCCACAGGAGTGGACCCCTCGTCCTGAGCAGT
COW 644 TCATTCTCCTGCACGCCTGTGCCACAACCCCACGGGAGTGGACCCCTCGTCCTGAGCAGT
MOUSE 677 TCCTCCTCCTGCATGCCTGCGTCAACAACCCCACGGGCGTGGACCCGCGTCCCGAGCAGT
RAT 706 TTCTCCTTCTGCACGCCTGCGTCAACAACCCCACGGGCGTGGACCCGCGTCCAGAGCAGT
TROUT 5 -----
DANIO 671 TAATCCTGCTCCATGCTTGTGCTCATAAACCCTACTGGGTTGACCCACGACCAGAGCAGT
CELEGANS 569 CAATCTTGCTTCACGCTTGTGCTCAACAACCCAACCTGGAGTTGATCCATCCCGTGACCAGT
901 901.....910.....920.....930.....940.....950.....

FROG 320 GATGAGAGAGG-----AGGCTA-----
FLOWER 724 GGAGAGAGATATCACAGCTATTCAAGGCTAAAAAGCATTTCGCATTCTTCGATATGGCTT
SOY 715 GGAGAGAGATCTCTTCCCAGATAAAGGCTAAGGGTCATTTCCTTTCTTTGACATGGCAT
HOMO 685 GGAAGGAAATAGCAACAGTGGTGAAGAAAAGGAATCTCTTTGCGTTCTTTGACATGGCCT
PIG 702 GGAAGGAGATGGCCACACTGGTGAAGAAAAACAATCTCTTTGCATTCTTTGACATGGCCT
COW 704 GGAAGGAGATGGCGACAGTGGTGAAGAAAAACAATCTCTTTGCAATTCTTTGACATGGCCT
MOUSE 737 GGAAGGAGATAGCGTCCGTGGTGAAGAAAAGAATCTCTTCGCATTCTTTGACATGGCCT
RAT 766 GGAAGGAAATGGCGGCGGTGGTGAAGAAAAGAATCTCTTCGCATTCTTTGACATGGCCT
TROUT 5 -----
DANIO 731 GGAAGGAGCTGTCAGCCGTCATTAAGGAGAGGAAACTTCTGCCGTTCTTTGACATGGCCT
CELEGANS 629 GGAAGAAGATCTCCGACATTGTGAAGAAACGCAACTTGTTTGTCTTCTTCGATATGGCTT
961 961.....970.....980.....990.....1000.....1010.....

FROG 337 -----TGCAGGAGCAAAAAACCT-----
FLOWER 784 ACCAAGGTTTTGCTAGTGGAGATCCAGCGAGAGATGCCAAGTCCATCAGGATCTTTCTTG
SOY 775 ATCAAGGTTTTGCTAGTGGTATCCAGAGAGAGATGCAAAAGCCATAAAGATTTTTCTTG
HOMO 745 ACCAAGGCTTTGCCAGTGGTGTGGTATAAGGATGCCTGGGCTGTGCGCCACTTCATCG
PIG 762 ACCAAGGCTTTGCCAGTGGCGATGGTAACAAGGATGCTTGGGCGATGCGCCACTTCATCG
COW 764 ACCAAGGCTTTGCCAGTGGCGATGGTAAACAAGGATGCTTGGGCTGTGCGCCACTTCATCG
MOUSE 797 ACCAAGGCTTTGCCAGCGGTGATGGTGATAAAGGATGCCTGGGCGTGCAGCCACTTCATCG
RAT 826 ACCAAGGCTTTGCCAGCGGCGATGGTATAAGGACGCCTGGGCGTGCAGCCACTTCATCG
TROUT 5 -----
DANIO 791 ACCAGGGCTTTGCTAGTGGAGACATTGATCGGGATGCCTGGGCTGTGAGATACTTCATTG
CELEGANS 689 ACCAAGGTTTCGCTTCCGGAGATGTTGACAATGACGCGTTCGCTGTTCTGTTACTTTGTGCG
1021 1021.....1030.....1040.....1050.....1060.....1070.....

FROG 355 ---ATGCTCTCCAT-----TCTTATGTAA-----CTCCCCC
FLOWER 844 AAGATGGTCATCATATTGGAATTTCTCAGTCCTATGCAAAAAACATGGGACTCTACGGCC
SOY 835 AGGATGGTCATTTAATAGGACTTGCTCAGTCATATGCAAAAAATATGGGACTGTATGGCC
HOMO 805 AACAGGGCATTAAATGTTTGCCTCTGCCAATCATATGCCAAGAACATGGGCTTATATGGTG
PIG 822 AACAGGGCATCAATGTTTGTCTCTGCCAGTCCATATGCCAAGAACATGGGCTTATACGGTG
COW 824 AACAGGGCATTAAATGTTTGTCTCTGCCAGTCCATATGCCAAGAACATGGGCTTATACGGTG
MOUSE 857 AGCAGGGCATCAATGTCTGCCTCTGCCAATCGTATGCCAAGAACATGGGCTGTACGGTG
RAT 886 AGCAGGGCATCAATGTCTGCCTCTGCCAATCCTATGCCAAGAACATGGGCTGTACGGTG
TROUT 5 -----
DANIO 851 AGCAGGGCCACAACATTCTCCTGTCCAGTCTTTTGC CAAGAACATGGGTCTCTATGGTG
CELEGANS 749 AGCAAGGACACAACATTGTTCTCTCAATCCTTTGCCAAGAACATGGGACTTTATGGTG
1081 1081.....1090.....1100.....1110.....1120.....1130.....

FROG 384 ATAG-----
FLOWER 904 AGAGGGTGGGATGTCTCAGTGTGCTTTG-----
SOY 895 AGCGAGCAGGAAGCCTGAGTGTGCTTTG-----
HOMO 865 AGCGTGTAGGAGCCTTCACTATGGTCTGCAAAAGATGCGGATGAAGCCAAAAGGGTAGAGT
PIG 882 AGCGTGTGGGAGCCTTCACTGTGGTCTGCAAAAGATGCTGAGGAAGCCAAAAGGGTGGAGT
COW 884 AGCGTGTGGGAGCCTTCACTGTGGTCTGCAAAAGATGCCGAGGAAGCCAAAAGAGTTGAGT
MOUSE 917 AGCGTGTGGGAGCCTTCAAGGTGGTCTGCAAAAGATGCAGAAGAAGCCAAAAGGGTGGAGT
RAT 946 AGCGTGTGGGAGCCTTCACTGTGGTCTGCAAAAGATGCAGAAGAAGCCAAAAGGGTGGAGT
TROUT 5 -----GATCCGAGGAAGTTAAGAGGGTGGAGT
DANIO 911 AGCGTGTGGGAGGATTCAAGTGGTGTGTGGAGATGCTGAAGAGGCTAAAAGAGTGCAGT
CELEGANS 809 AACGAGTCGGTGCTTTCTCCGTTGTTACCTCGACGCTGATGAGGCTGCTCGTGTGCTT
1141 1141.....1150.....1160.....1170.....1180.....1190.....

FROG 388 -----GCTGAGGCGGA-----CGTTTGCAGTAGAA-----
FLOWER 932 -----TGAAGATCCGAAGCAAGCCGTGGCTGTGAAAAGTCAATTGCAGCAGCTAGCTAG
SOY 923 -----TGAAGATGAGAAACAAGCTGTGGCTGTAAAAAGTCAGTTGCAGCTGATTGCTAG
HOMO 925 CACAGTTGAAGATCTTGATC-----CG
PIG 942 CACAGTTGAAGATCTTGATC-----CG
COW 944 CCCAGTTGAAGATCCTGATC-----CG
MOUSE 977 CACAGCTGAAGATCTTGATC-----CG
RAT 1006 CACAGCTGAAGATCCTGATC-----CG
TROUT 33 CTCAGCTGAAGATCTTGATC-----CG
DANIO 971 CTCAGCTTAAGATCTTGATT-----CG
CELEGANS 869 CTCAAGTCAAGATCCTTATT-----CG
1201 1201.....1210.....1220.....1230.....1240.....1250.....

FROG 413 -----
FLOWER 986 ACCAATGTACAGCAACCCACCTTTGCATGGTGCTCAGCTGGTCTCAACCATTCTTGAAGA
SOY 977 ACCCATGTACAGTAACCCACCTCTCCATGGAGCACTTATAGTTTCTACTGTCCTTGGTGA
HOMO 947 TCCCATGTATTCCAACCCCTCCCCTCAATGGGGCCCGGATTGCTGCTGCCATTCTGAACAC
PIG 964 TCCTATGTATTCCAACCCCTCCTGTCAACGGGGCCCGGATTGCCTCGACCATCCTGACCAG
COW 966 TCCCATGTATTCCAACCCCTTCAATGGGGCCCGGATTGCCTCCACTATTCTCACCAG
MOUSE 999 TCCCTGTATTCCAACCCACCTTCAATGGGGCCCGGATCGCAGCAACCATCCTGACTTC
RAT 1028 CCCCTTGTATTCCAACCCCTCCTCAATGGAGCCCGGATCGCCGCAACCATCCTGACTTC
TROUT 55 GCCAATCTACTCCAACCCCTCCAATGAATGGAGCCAGAATTGCTGCCACTATTCTCAACAC
DANIO 993 CCCATTACTCCAACCCCTCCCATGAATGGTGCCCGCATCGCCTCCACGATCCTCACTAC
CELEGANS 891 CCCACTCTACTCCAACCCACAGTCCATGGAGCTCGCATTGCTTCCCGCATCCTCGCGGA
1261 1261.....1270.....1280.....1290.....1300.....1310.....

FROG 413 -----CGG
FLOWER 1046 CCCAGAGTTAAAGAGTCTGTGGCTAAAAGAAGTTAAGGTCATGGCTGATAGGATCATCGG
SOY 1037 TCCAGATTTGAAGAAGTTATGGCTTAAAGAAGTCAAGGTTATGGCAGACCGCATCATCGG
HOMO 1007 CCCAGATTTGCGAAAACAATGGCTGCAAGAAGTGAAAAGCATGGCTGACCGCATCATTGG
PIG 1024 CCCGGATCTGCGGCAACAATGGTTGCAGGAAGTCAAGGGCATGGCCGACCGCATCATTAG
COW 1026 CCCGGATTTGCGGAAACAATGGTTGCACGAAAGTGAAGGGCATGGCCGACCGCATCAG
MOUSE 1059 TCCAGACTTGCGGAAGCAATGGTTGCAGAGGTGAAAAGCATGGCTGACCGCATCATCAG
RAT 1088 TCCAGACTTGCGGAAGCAATGGTTGCAGGAGGTGAAAAGCATGGCTGACCGCATCATCAG
TROUT 115 ACCAGACCTTTATAAAATATGGTTGGGGGAGTCCACGGCATGGCCAACCGCATCATCAA
DANIO 1053 ACCAGAGCTGCGTTCTACATGGCTGGAGGAGGTGAAGGGAATGGCAGACCGTATCATTGG
CELEGANS 951 TCCAGCTCTCAACAAGCAATGGCTCGGAGATGTCAAGCTCATGGCTGATCGTATCATCAC
1321 1321.....1330.....1340.....1350.....1360.....1370.....

FROG 416 GATGAGA----CTCTAGG-----
FLOWER 1106 CATGAGAACTACTTTGCGAGAA-----AGCCTTGAGAAGTTAGGATCGCCTTTGTCT
SOY 1097 AATGAGGACTACACTACGAGAA-----AAGTTAGAAAAGAAGGGGTCTACTTTGCC
HOMO 1067 CATGCGGACTCAACT-----GGTCTCCAACCTCAAGAAGGAGGGTTCACCCACAA
PIG 1084 CATGAGGACCCAGCT-----GGTCTCCAACCTCAAGAAGGAGGGTCTCCTCCACAA
COW 1086 CATGCGGACACAGCT-----GGTGTCCAACCTCAAGAAGGAGGGTCTCCTCCACAA
MOUSE 1119 CATGAGGACCCAGCT-----GGTCTCCAACCTGAAGAAGGAGGGTCTTCCACAA
RAT 1148 CATGAGGACCCAGTT-----GGTCTCCAACCTGAAGAAGGAGGGTCTCGTCCACAA
TROUT 175 GATGAGGGAGCAGCT-----GGCAGCCAACCTGAAGAGTGAGGGTCTCACTCACAA
DANIO 1113 AATGAGAGAAATGCT-----GGTGACTAATCTGAAGAAGGAGGGTCTCACTCACAA
CELEGANS 1011 CATGAGAACTACGCTCAAGGATTTGCTCGCC-----AAGGAGGGATCTACTCGTAA
1381 1381.....1390.....1400.....1410.....1420.....1430.....

FROG 430 -----CTCTAGAACA
FLOWER 1157 ATGGGAGCACGTTACCAAACAGATTGGAATGTTCTGCTACAGTGGGTTAACACCAGAACA
SOY 1148 ATGGCAGCATATAACTAATCAGATTGGTATGTTCTGCTACAGTGGATTGACACCTGAACA
HOMO 1118 TTGGCAACACATCACCGACCAAATGGCATGTTCTGTTTCACAGGGCTAAAGCCTGAACA
PIG 1135 CTGGCAGCACATCGTTGACCAGATCGGCATGTTTGTTCACAGGCATAAAGCCTGAACA
COW 1137 CTGGCAGCACATCATTGACCAGATCGGCATGTTTGTTCACAGGCCTAAAGCCTGAACA
MOUSE 1170 CTGGCAGCACATCACCGACAGATCGGCATGTTCTGTTTCACCGGCCTAAAGCCTGAGCA
RAT 1199 CTGGCAGCACATCACCGACAGATCGGCATGTTCTGCTTCACCGGCCTAAAGCCTGAGCA
TROUT 226 CTGGCAGCATGTAATCGACCAAATAGGCATGTTCTGCTTCACAGGCCTCAAGCCTGAACA
DANIO 1164 CTGGCAACACGTGACTGACCAAAATCGGCATGTTCTGCTTTACTGGACTCAAACCTGAGCA
CELEGANS 1062 TTGGGAGCACATTACCAACCAAATGGAATGTTCTGCTTTACTGGAATCAACCCACAACA
1441 1441.....1450.....1460.....1470.....1480.....1490.....

FROG 440 G-----
FLOWER 1217 GGTTGACCG-----CTTAACAAGCGAATATCACATCTATAT
SOY 1208 GGTTGATCG-----TATGACAAACGAGTTTCATATTTACAT
HOMO 1178 GGTGGAGCGGCT-----GATCAAGGAGTTCTCCATCTACAT
PIG 1195 GGTGGAGCGGCT-----GACCAAGGAGTTCTCCATCTACAT
COW 1197 GGTGGAGCGGCT-----GACCAAGGAGTTCTCCATCTACAT
MOUSE 1230 GGTAGAGCGGCT-----GACCAAGGAGTTCTCGGTCTACAT
RAT 1259 GGTGGAGCGGCT-----GACCAAGGAGTTCTCAGTCTACAT
TROUT 286 GGTTGAGCGTCT-----GACTAAGGAGTTTTCAGTATACAT
DANIO 1224 GGTGGAGCGTCT-----TACAAAGGACTTCTCTGTTTACAT
CELEGANS 1122 AGTTGAGAAGCTTATCAAGGAACACTCTGTCTACCTCACCAAGGA-----
1501 1501.....1510.....1520.....1530.....1540.....1550.....

FROG 441 -----
FLOWER 1253 GACCCGTAACGGCCGTATCAGT-----
SOY 1244 GACCCGTAACGGTCGTATCAGT-----
HOMO 1214 GACAAAAGATGGCCGCATCTCTGTGGCAGGGGTACCTCCAGCAACGTGGGCTACCTTGC
PIG 1231 GACAAAGGATGGCCGCATCTCTGTGGCAGGGGTACCTCTGGCAATGTGGGCTACCTTGC
COW 1233 GACAAAGGATGGCCGCATCTCTGTGGCAGGGGTACCTCAGGCAACGTGGCATACTTGC
MOUSE 1266 GACAAAGGATGGCCGAATCTCCGTGGCAGGGGTACCTCTGGCAATGTGGGCTACCTTGC
RAT 1295 GACAAAGGATGGTCTGAATCTCTGTGGCAGGGGTACCTCTGGCAATGTGGGCTACCTTGC
TROUT 322 GACCAAAGATGGTAGAATCTCCATGGCAGGTGTACCTCCGGTAACGTGGGATACCTAGC
DANIO 1260 GACTAAAGATGGCCGTATCAGCGTTGCCGGCGTGACCTCTGGAAATGTTGAATACCTCGC
CELEGANS 1167 -----CGGACGTATCTCGGTGGCAGGGAATTTTCATCGAACAATGTCGTTACCTTGC
1561 1561.....1570.....1580.....1590.....1600.....1610.....

FROG 441 -----
FLOWER 1275 -----
SOY 1266 -----
HOMO 1274 CCATGCCATTACCAGGTCACCAAGTAATGTCCCTGGGTCGAGGAAACAGAGACAACCTT
PIG 1291 CCATGCCATTACCAGGTCACCAAGTAATCCCCTGGTGAGAAGGAACAGAGACAACCTT
COW 1293 TCACGCCATTACCAGGTCACCAAGTAATCCCCTGGTCAGCAGGAACAGAGACAACCTT
MOUSE 1326 CCATGCCATTACCAGGTCACCAAGTAAT-TCCAGGTGCAAAGGAACAGAGACCCTTT
RAT 1355 CCACGCCATTACCAGGTCACCAAGTAAT-CACCAGGTGCAAAGGAACAGAGATCACTTT
TROUT 382 ACATGGAATCCACGCTGTACTAAGTA-----
DANIO 1320 ACATGCCATTACCAGGTCACCAAGTA-----GAC-----
CELEGANS 1218 CCACGCTCTCCACCAAGTCACCAAGTAA-----
1621 1621.....1630.....1640.....1650.....1660.....1670.....

FROG 441 -----
FLOWER 1275 -----
SOY 1266 -----
HOMO 1334 TCTGTCTTCAGCCTCTGCTATTGAGAGCTTCACACAGACAATGAGAGAGGGTGGATGGTG
PIG 1351 CCTGTCTTCAGCCTCTGCTGTTGTGAGATTTCGAGGGAGGAAGAGAGAGGGTGGATGGTG
COW 1353 CCTGTCTTCAGCCTCTGCTGTTATGAAATCCACATGGAGGAAGAGGGAGGGTGGATGGTG
MOUSE 1385 CC---CGACAGCCTTTGCGCTCGTGAGCGTCACGTGCAGGGTGAGGGAGGGTGGGTGGTG
RAT 1414 CC---CTTCAGCCTTTGCTCTCATGAGAGTCACGTGCAGGGTGAGGGAGGGTGGATGGTG
TROUT 409 -----AAAAGGAGAATGCTGGG-----
DANIO 1350 -----CAAATTTGCTATGATGGA-----
CELEGANS -----
1681 1681.....1690.....1700.....1710.....1720.....1730.....

FROG 441 -----
FLOWER 1275 -----
SOY 1266 -----
HOMO 1394 GTGAGTGATCATTTCTTTC-AGCCAC-AGTG-TGTAACACTCAG--CATTTGAATGT--
PIG 1411 GTGAGCGGATCGTTTTTTTTC-AACCAC-AGTACTT-AATGCCAG--CGATTGAATGTGT
COW 1413 GTAAGCGGATCTTTTTTTTCCAACCACTAGTACTTTAAAACCTCAG--CGATTGAATGTGT
MOUSE 1442 GTGAATAGATC--CGGTTTCCAACCAC---GGTGCATAACTCAG--CGACTGAACCTCGC
RAT 1471 TTGAGTAGATC--CTGTTTTCAACCAC---GGTGCATAACTCCTGTGATTGAACGCGT
TROUT 426 -----
DANIO 1368 -----
CELEGANS -----
1741 1741.....1750.....1760.....1770.....1780.....1790.....

FROG 441 -----
 FLOWER 1275 -----ATGGCTGGTGTACAACA
 SOY 1266 -----ATGGCTGGTCTTAATACG
 HOMO 1447 TTCTCAGAAAAGAACATGTAGTGACACAGGGCAGAGGCATCCATGGCTGGC-----
 PIG 1466 TTCTCAGAAAAGAATGTGCAGTGAAATAGGGCAGATGCACCAGTGGCTGGT-----
 COW 1471 TTCTCAGAAAAGAACGTGCAGTGAAATAGGGCGGAGGCACCTGTGACTGGT-----
 MOUSE 1494 TCCTCGGAAGA-----GAGGTAGGGCAGAGGCTTCCTCGGCTGGT-----
 RAT 1525 TCCTCGGAAAA-----GAGGTAGGGCAGAGGCTCCCACGGCTGAT-----
 TROUT 426 -----AGAAA-----CAGTG-----GGCA-----
 DANIO 1368 -----AGA-----
 CELEGANS
 1801 1801.....1810.....1820.....1830.....1840.....1850.....

FROG 441 -----
 FLOWER 1293 GGAAACGTGGGATACCTTGCGAATGCTATACATGAAGTCACCAAGTCATCTTAAATCATT
 SOY 1284 GGCAACGTGGATATGTCTTGGACGCTATCCATGAGGTTACAAAATCATTCTAGATTATT
 HOMO 1498 -----GTCTGGAATAT-----TAAAC-----CAAACCTCTCCCGGTCCTTT
 PIG 1517 -----GTCTGGAACCTTCGT-GGCTGTAAAC-----CAAACCTCGCCCTCATCCTTT
 COW 1522 -----GTCGGGAACCTTTGT-GGCTGTAAAC-----CAAACCTCATCC-----T
 MOUSE 1534 -----ATCTGGAACCTTCGTTCGGCTCTAAAC-----CAAACCTCATCC-TT
 RAT 1565 -----ATCTGGAACCTTCGTTCGGCTCTAAAC-----CAAACCTCATCC-TT
 TROUT 441 -----CGGTGGCGCTGGA-----
 DANIO 1371 -----
 CELEGANS
 1861 1861.....1870.....1880.....1890.....1900.....1910.....

FROG 441 CAATGACAAGGGGCAGGC-----
 FLOWER 1353 TACTTACATGTTTCAGCCAAACATACAAATTTTGTGTTGAAGAGTCAATAA-----
 SOY 1344 CAATCAC-----CCAACAGGTGACCAAATTTTGTCTTTGGAGACAAACATCTCAGAAGT
 HOMO 1534 TT-TCTCCAA-----
 PIG 1561 TTATCTCCAG-----
 COW 1558 TTATTTCCAG-----
 MOUSE 1576 TTGTCTCCAG-----
 RAT 1609 TTGTCTCCAG-----
 TROUT 454 -----
 DANIO 1371 -----
 CELEGANS
 1921 1921.....1930.....1940.....1950.....1960.....1970.....

FROG 459 -----GGACACGACACTACATCTTCTACTGTCC-----CTGGT
 FLOWER 1403 -----GACAGGAGGCTAGATTTGT-----ACTTCTGCAATTGGT
 SOY 1399 AGTACCCTTATCCAGGGGAGCAAATAAATTTAATAAAGTCTGACAAATTTTCAACTTGT
 HOMO 1543 -----CTTTTCTC-----
 PIG 1571 -----TTTTTCCA-----
 COW 1568 -----TTTTTCCA-----
 MOUSE 1586 -----CTTTTC-----
 RAT 1619 -----CTTTTC-----
 TROUT 454 -----
 DANIO 1371 -----
 CELEGANS
 1981 1981.....1990.....2000.....2010.....2020.....2030.....

FROG 492 GAAGGGGCAACA-----
 FLOWER 1437 TTTGTGGGAAC-----TGAAAGTTTACC-----
 SOY 1459 TTCGGGGTAAGATAGTGATACTCTTCAGGGTTACCTTGCATATTGAAGACCCTTATTGC
 HOMO 1551 -----AAAGAGTTTACAT-----GTGC
 PIG 1579 -----ACAGAGTTTACAT-----GTGC
 COW 1576 -----CCAGAGTTTACAT-----GTAC
 MOUSE 1592 -----TGAAAGTTTACAC-----ACGC
 RAT 1625 -----TGAAAGTTTACAC-----ATGC
 TROUT 454 -----
 DANIO 1371 -----
 CELEGANS
 2041 2041.....2050.....2060.....2070.....2080.....2090.....

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FROG      504  -----GACCTG
FLOWER    1460 -----CATAAACAGTAATTTAT-----
SOY       1519 AATACGTATCCGATTTATCATATCCATGCACCATAGATTATATCCATTTTTACAGACATC
HOMO      1568 AA-----GAAAGTCATCGCACCAAAAAA-----
PIG       1596 AA-----GAACAACGTAAGCCCCCAAAAAA-----
COW       1593 GA-----GA-----AAGCCCAAAAAA-----
MOUSE     1609 AA-----GAAAAATCACAGCACCAACA-----
RAT       1642 AA-----AAAAATCACAGCACCAAA-A-----
TROUT     454  -----CACAATCCTTAACAAAATA-----
DANIO     1371 -----TTTAACTTCTA-----
CELEGANS  2101 2101.....2110.....2120.....2130.....2140.....2150.....

FROG      510  TTGGTT-----
FLOWER    1477 -----TAGCGC-----
SOY       1579 TTGTTTAGCACTTTAATGAGCATAACCCTGT-----
HOMO      1591 -----CCTGTCAATTATGCCATTGCAATATTTT CAGAAGC
PIG       1624 -----TCTGTCAC-----TATTT CAGAAGC
COW       1614 -----AAAAACA-AACCCTGTCAGTCACACCATTTC AATATTT CAGAAGC
MOUSE     1632 -----CCTGTCAGCCATGGCACTGGAATAGGTCAGACGC
RAT       1663 -----CCTGTCAG-CATGGCATAGGCACAGGTCAGAAGC
TROUT     473  -----ATAATGC-----CCACTCCACCCA-----CC---ACC
DANIO     1382 -----GACCTGC-----TTAGTCCACCCCAATATTCC---TCT
CELEGANS  2161 2161.....2170.....2180.....2190.....2200.....2210.....

FROG      516  -----TTT-----
FLOWER    1483 -----ATTTTT-----
SOY       1610 -----ATCATCATTTTT-----
HOMO      1625 TTTAACTGAA-----GTGTCA--GGTTCCTCGTGAGAAACAA-----GCA
PIG       1644 TTTAACTGAGC-ACCTCATGGTGTGCGGGTTCCTCTGTAGAACC AATGAAAATAGCA
COW       1659 TTTAAGTGAATAACCTTTTGGTGT CAGGGGTTCTCTG-AGAACCAGCCTGAAAACAGCA
MOUSE     1666 TTTACCTAAAGCCTCAGGTGGTATCAGGGGTTCCCCCTGGACCC--CAGTAGAGCCTCC
RAT       1696 TTTACCTGAAGCCTCAGGTGGTGT CAGGGGTTCCCCCTGTGGACCC--CGGTAGAGCCTCT
TROUT     497  TT-----ACAGAGGAGCTG-----
DANIO     1412 TTGGACTCAGATCTCGGCTT-----
CELEGANS  2221 2221.....2230.....2240.....2250.....2260.....2270.....

FROG      519  -GTAAAGCATAATTTCTGTA-----ATGTG-----GGCT-----
FLOWER    1490 -CGTTA-----
SOY       1623 -TTATAAAATAATTTGAGTAGTAGATTGAATAAG-----GGCTTTATTT
HOMO      1663 CACCTTAGAGGCTTTGAG-AGAAGGCCAGCTAGTTCTGT CATGAGTAGTCGGCCTCGTGT
PIG       1703 CCTATCAAAGGCTTTGTG-AAAAG--ATCTAGTTCTAACATTAACAG----CCTCATGT
COW       1718 CCTGTTAGAGGCTTTATG-AAAAG--ATGAAGTTCTAACATTAGCAGTCAGCCTCATGT
MOUSE     1724 CCTAATAGAGGCTATAAG-AGAAAAATAACTAGTTCTGT CATTAAACAGTTGTCTCAAGT
RAT       1754 CATATTAGAGGCTGTAAG-AGAAGAATAACTAGTTCTGT CATTAAACAGTTG--TCGAGT
TROUT     511  -----
DANIO     1432 -----
CELEGANS  2281 2281.....2290.....2300.....2310.....2320.....2330.....

FROG      547  -----GCTGAC
FLOWER    1495 -----GCTGGG
SOY       1666 -----ATGGTGAA
HOMO      1722 CTGTCCTCCCATCTTGGAACAACCT-TATCAACAGGCCGCACTGCAGAAATGATGTTTTA
PIG       1755 TTGCCCTCCTGTGATTGAGCAACCG-TATCAGCAAACCT--ATTACCGAAATC-----
COW       1774 TTGTCCTCCCGTGACTGAGCAA-CT-TGTCAACAAACTGTATTATGGAATCATGATTT-
MOUSE     1783 TCGTCCTCTTGGTGTGGAGCAAACCTGTGT CAGCAGACCACATTACAGAAATTATGCTTTA
RAT       1810 GTGTCCTCGTGGTGTGGAGC-AACTGTGT CAGCAGACCACATTATGGAATTATGCTTTA
TROUT     511  -----GACA-----
DANIO     1432 -----CACT-----
CELEGANS  2341 2341.....2350.....2360.....2370.....2380.....2390.....

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FROG 553 A-----
FLOWER 1501 C-----
SOY 1674 C-----
HOMO 1781 TGAAAAC-CATGAG-CTGCTGCCACTCCAGCAAGGGAAATAA-----TGCAGTTTCCTGT
PIG 1804 -----TGTTACCACTGCACCAA-AGAAAACAAAAGATGCTGTTTCCTGT
COW 1831 -----AC-AGCGAGTCTGCTACCACTGTAGTGGGAGAAAATAAAAAGATGCTCTTTCCCAT
MOUSE 1843 CAAAAACCAACAGGTCTGTTGCCACTTCAAC-AGGGACAGTAGAAGATGTAGTGTCTGT
RAT 1869 CAAAAAC-----CAAC-AGGGACAGTAGAAGATGTAATGT-----
TROUT 515 -----TTCTTTAAGACTGTAAATTGTTCAA-----
DANIO 1436 -----TCATTTGGCTGTTTCACTAGGTCAA-----
CELEGANS
2401 2401.....2410.....2420.....2430.....2440.....2450.....

FROG 554 -----CAGT-----
FLOWER 1502 -----AATAAAG-----
SOY 1675 -----AGGAAGTA-----
HOMO 1834 CTTATTTAAGAAAAAGAGA-----AGGCTC-----
PIG 1847 CTTATTTAAGAAATAAAGAGAGCTCCTTTGCAGCACAGTGGGTTAAGGATCCAGTGTAG
COW 1885 CTTATTTAGGGA-----
MOUSE 1902 C-----
RAT 1903 -----
TROUT 540 -----
DANIO 1461 -----
CELEGANS
2461 2461.....2470.....2480.....2490.....2500.....2510.....

FROG 558 -----
FLOWER 1510 -----CAAAG
SOY 1683 -----CGTAG
HOMO 1859 -----
PIG 1907 TCACTGCTGTGGCGCGGGTTCAGTCCCTGGCCAGGAACTTCCACATGCCATGGGCACAG
COW 1897 -----
MOUSE 1903 -----
RAT 1903 -----
TROUT 540 -----CTTTGACCTC-AAC-----
DANIO 1461 -----CGTGGATCCCTAAC-----
CELEGANS
2521 2521.....2530.....2540.....2550.....2560.....2570.....

FROG 558 -----
FLOWER 1515 C-----
SOY 1688 CTTCA-----
HOMO 1859 -----
PIG 1967 CTTTAAAAAAACGAAAAAGGAAGAGGCGCTTTTTTTT--AGCACATGGAGGCAACTTAAT
COW 1897 -----AAAGAGAAAGAAGGCTTTTCTTTCCAGTACCTGCAGG-ATTTAAT
MOUSE 1903 -----CGCCTGC-----
RAT 1903 -----
TROUT 553 -----AACGAA-----GC-----
DANIO 1475 -----ATGGAT-----GCTTTCAGGGTGTCTAAC
CELEGANS
2581 2581.....2590.....2600.....2610.....2620.....2630.....

FROG 558 -----TTGC-----
FLOWER 1516 -----C-----
SOY 1693 -----TTCCTTAC-----
HOMO 1859 -----TCTTTTCTCCCTTGTCATTGCCGTTCTTTTCTTACACGCA-AAACATTTTAAAC
PIG 2025 GTTCCTTTTTTCTCCCTCGTCACTGCTGTTCTGTTCC--ATAGGCACAAAGACCTGTAAC
COW 1942 GTTCCTCTTTTTCTCCCT-ATCACTGCTGTTCTTTCC--TCGGGCCAGAGATCTGTAAC
MOUSE 1910 -----CCCTTGTCATTGCTGTTCT-----A
RAT 1903 -----CTTGTCATGGCTGTTCT-----G
TROUT 561 -----
DANIO 1499 GGGAGTCGTCTCGC-----
CELEGANS
2641 2641.....2650.....2660.....2670.....2680.....2690.....

FROG 562 -----
FLOWER 1517 -----
SOY 1701 -----
HOMO 1913 TATTGCAGTT--TCATCCCATTCTACTGCTTGATTGACCATCAACTCCATCCTATCGAGA
PIG 2083 TA-CCTAGGTTTTTCATCCTGTTCTACTCTTTGACTGACCATCGGTCCCATCCCATAGGAT
COW 1999 TAGCCCAGATATTCGTCTCTACTTCTGAGTGACCATCAATCCCATCCCATAGGAT
MOUSE 1930 GAGCCTAGAGTCTCATCCCGTTCTACTGCA-----AACGTCCGCCTCAGCCTATGGGG-
RAT 1921 TAGCCTGGAGTTTTCATCCCATTCTACTGCTCGGTTGACCATCAACCTCATCT-----TA-
TROUT 561 -----
DANIO 1513 -AGGCTA-----TCCTGTGGTTCAGTGACTAATAAGCACA-----
CELEGANS -----
2701 2701.....2710.....2720.....2730.....2740.....2750.....

FROG 562 -----TCCAC-----
FLOWER 1517 -----TAAAC-----
SOY 1701 -----TACAC-----
HOMO 1971 TTATTTA-----AGAATGAAGA---ACATAATTTTTCTGCTGATGCCG-TACCCTCACCC
PIG 2142 TTACTTACCTGAAGAGTGAAGA---ATGGTA-TTTACTGCTCATCCCA-TACCCTCACTT
COW 2059 TTATTTATTTGAAGAATGCACACGCACATTA-TTTACTGCTCATCCCAATACCCTCGCTT
MOUSE 1983 GGAGTTACAT-AAGAATGGAGA---GCATAGTTTTCTGCTCCTGC-ATAGC---CTCCT
RAT 1976 GGAGTGATCT-AAGAATAAAGA---ATGTAGTTTTTCTGTTTCATGCCATAAC---CTTCT
TROUT 561 -----
DANIO 1547 -----CTTCAGAA-----CATT-----
CELEGANS -----
2761 2761.....2770.....2780.....2790.....2800.....2810.....

FROG 567 -----
FLOWER 1522 -----
SOY 1706 -----
HOMO 2022 TTTTCAGCAAAGAATAGTGGAGAGTAGGAAAC--TGTACTTTATCTCGGCATCCTCTTGA
PIG 2197 TTCTTGGCAAAGAATAGCAGAGAGTAGGTAC--TGCCCTTTACTCCAGCATCCTCTCCA
COW 2118 TTCTTGGCAAAGAATAGCAGAGAGTAGGT-AA--ACCGCTTTATTTTGGCATCCTCTTCA
MOUSE 2035 CTCTCATCAAAGAGCCGTGGAGAGAGAGACCCTGCCCTTGATTTTCAGAGTCTCTTCA
RAT 2029 GTCTCAGCAAAGAGCC--GGGAGAGTGGGACCCTGCCCTTGATTTTCAGAGTCTCTTCA
TROUT 561 -----CACCATGTCAAAGG
DANIO 1559 -----TTTCATCCTGTTAAACT
CELEGANS -----
2821 2821.....2830.....2840.....2850.....2860.....2870.....

FROG 567 -----A-----
FLOWER 1522 --GATGGATT-----TTTGG-----
SOY 1706 --TAT-TATT-----CTGTT-----
HOMO 2080 ATGATAGTGC AAGTTTCTCCAGTTGGGATGTTGTCTCTGCCCGTTGGACCTCCT-CCCT
PIG 2255 GTGATTATTTAATTATCTCCTGTTGGGATGTTGCCTCTGCCCGTTGGACCATGTACCTT
COW 2175 -----ACGTGGGAGGTTGCCTCT-CCCAGCTGGCCCTCGT-CCCT
MOUSE 2095 GTCATTGATTGATTGGCTCCTACTGGGATGGGGCCTCTGCCAGCTGGACCT-----CT
RAT 2087 G----TGATTGATTGGCTCCTACGGGGTGGGGCCTCTGCCAGCTGGACGT-----CC
TROUT 575 TTGTTT-----
DANIO 1576 CTGTATGA-----ACT
CELEGANS -----
2881 2881.....2890.....2900.....2910.....2920.....2930.....

FROG -----
FLOWER -----
SOY -----
HOMO 2139 TTGTTGAATGTGGT-GTGCAGCCTCTCATCTCACACTGTGAGTCCAGCG-GCGCAGGGTG
PIG 2315 TTCTTCAGTGTGGTTGTGCCATCGCTTACTTCGTATTATGAGTCAGGCAA-TGCAGGGTA
COW 2214 TTGTGCAGTGTGGTTGTGCAGTCAGT--CATCTCATCAGGAGTCAGGCCTGTGCAGGGTA
MOUSE 2149 TCATCCATCCTGGCTGCACAGCCTGTCTCTTAC--ATGAGTCAGACG--TGCAGGGTA
RAT 2137 TCATTATCCTGACTG--CAGCCTG--TCTTAC--ATGAGTCAGACA--TGCAGGGTA
TROUT 581 -----AGT-----
DANIO 1587 TTATTTATTGTG-----TGAGT-----
CELEGANS -----
2941 2941.....2950.....2960.....2970.....2980.....2990.....

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FROG -----
FLOWER -----
SOY -----
HOMO 2197 GTACCAGGAAAGAGGATATTCTAGGCTT-----GCGTGCTGCTAGCTG
PIG 2374 GGACCGGGAAAGAGGATACGCCGGGCTTTGGTTTTAACCT---TTGCATGCTGCCAGCTG
COW 2272 GAACCGGGAAAGAGGATACTCTGGGCTTCAGTTTTAACCC---TTGTGTGCTGCCAGCTG
MOUSE 2204 GGATCAG--AAGGAGATACTCTGGGGT-----TTGTGTGCTGCCAGCCC
RAT 2188 GGATCGG--AAGGAGTATTCTGGGGT-----TTGTATGCTACCAGCCC
TROUT 584 -----GATGGTCCAATGATCTGCCCTA-----
DANIO 1604 -----GA-AGTAAAATGAGCAACAGTAATAAACAGTATTGTGT-----
CELEGANS -----
3001 3001.....3010.....3020.....3030.....3040.....3050.....

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FROG -----
FLOWER -----
SOY -----
HOMO 2240 GGTTCAGGCTTCACCCACTGG-AAAGA--ACCACCATCTGCTCTAACCATGTAGACTTAT
PIG 2431 GGCTCAGGCTTCACCCTTTGG-AAGGATAACCACCATTCGCTTTAATCATGTAGACTTAC
COW 2329 GGCTCAGGCTTCACCC-----
MOUSE 2246 GGCTCTAGACTCCGCCCTTGGGAAAGATAAACCACCATCTGCTCTAATCATGTAGACGTAC
RAT 2230 GGCTC-AGACTCAGCCCTTGGGAAAGATAAACCACCATCTGCTCTAACCAGTGTAGACGTAC
TROUT 606 -----CAT-----
DANIO 1641 -----CCAT-----
CELEGANS -----
3061 3061.....3070.....3080.....3090.....3100.....3110.....

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FROG -----
FLOWER -----
SOY -----
HOMO 2297 TGCGGCCTGGTTTTCTCTGTTACAATAAAAATTACTGTAGA--CCC
PIG 2490 TGCTGCCTGG-TTTCTCTGTTACAATAAAGTTACTGTAGATTTAG
COW 2345 -----CCC
MOUSE 2306 TGCCGCC-TGGTTTCTCTGTTACAATAAAAATTACTATAGA--C-C
RAT 2289 -----CT-GGTTTTCTCTGTTACAATAAAAATTACTACAGA--CCC
TROUT 609 -----TTGACAAATGGTCCGA-----T
DANIO 1645 -----TTAAAAAAAAAAAAAAAAAAAAAAAAAAAA
CELEGANS -----
3121 3121.....3130.....3140.....3150.....3160..

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