DNA STRINGS:

1)

ATGACCGAGTACAAGCTTGTGGTGGTGGGAGCTGGTGGTGTGGGGAAGAGTGCGCTGACCATCCA
GCTCATCCAGAACCACTTTGTGGACGAGTATGACCCCACCATCGAGGACTCGTACAGGAAGCAGG
TGGTGATCGACGGCGAGACGTGCCTGCTGGACATCCTGGACACTGCGGGTCAGGAGGAGTACAGC
GCCATGCGGGACCAGTACATGAGGACCGGAGAGGGCTTCCTCTGCGTCTTCGCCATCAACAACAC
CAAGTCCTTCGAGGACATACACCACTACAGGGAGCAGATCAAGCGGGTGAAGGACTCCGAGGATG
TTCCCATGGTGCTCGTGGGGAACAAGTGTGACCTGCCCTCGCGCACGGTGGACACCAAGCAAGCT
CAGGACCTGGCCCGCAACTACGGCATCCCCTTCATCGAGACCTCTGCTAAAACCAGACAGGGTGT
GGACGACGCCTTCTACACGTTAGTGCGGGAAATCCGCAAGCACAAGGAGAAGACCAGCAAAGAGG
GGAGGAAGAAGAAGAAGAAGAAGTCGAAGGCCAAGTGCGTGGTCATGTGA

ANSWER:

Anguilla anguilla Ras (ras) mRNA, complete cds

Sequence ID: DQ195224.1 Length: 570 Number of Matches: 1

GC CONTENT- 57.719298245614034%

2)

GGACTGGGGACAGGGGTCCTGGGGACAGGGGTCCGGGGACAGGGTCCTGGGGACAGGGGTGTGGG
GACAGGGGTCTGGGGACAGGGGTGTGGGGACAGGGGTGTGGGGACAGGGGTCTGGGGACAGGGGT
GTGGGGACAGGGGTCCGGGGACAGGGGTGTGGGGACAGGGGTCTGGGGACAGGGGTGTGGGGACA
GGGGTGTGGGGACAGGGGTCTGGGGACAGGGGTGTGGGGACAGGGGTCCTGGGGACAGGGGTGTG
GGGACAGGGGTGTGGGGACAGGGGTGTGGGGACAGGGGTGTGGGGACAGGGGTCCTGGGGATAGG
GGTGTGGGGACAGGGGTGTGGGGACAGGGGTCCCGGGGACAGGGGTGTGGGGACAGGGGTGTGGG
GACAGGGGTCCTGGGGACAGGGGTCTGAGGACAGGGGTGTGGGCACAGGGGTCCTGGGGACAGGG
GTCCTGGGGACAGGGGTCCTGGGGACAGGGGTCTGGGGACAGCAGCGCAAAGAGCCCCGCCCTGC
AGCCTCCAGCTCTCCTGGTCTAATGTGGAAAGTGGCCCAGGTGAGGGCTTTGCTCTCCTGGAGAC
ATTTGCCCCCAGCTGTGAGCAGGGACAGGTCTGGCCACCGGGCCCCTGGTTAAGACTCTAATGAC
CCGCTGGTCCTGAGGAAGAGGTGCTGACGACCAAGGAGATCTTCCCACAGACCCAGCACCAGGGA
AATGGTCCGGAAATTGCAGCCTCAGCCCCCAGCCATCTGCCGACCCCCCCACCCCGCCCTAATGG
GCCAGGCGGCAGGGGTTGACAGGTAGGGGAGATGGGCTCTGAGACTATAAAGCCAGCGGGGGCCC
AGCAGCCCTCAGCCCTCCAGGACAGGCTGCATCAGAAGAGGCCATCAAGCAGGTCTGTTCCAAGG
GCCTTTGCGTCAGGTGGGCTCAGGGTTCCAGGGTGGCTGGACCCCAGGCCCCAGCTCTGCAGCAG
GGAGGACGTGGCTGGGCTCGTGAAGCATGTGGGGGTGAGCCCAGGGGCCCCAAGGCAGGGCACCT
GGCCTTCAGCCTGCCTCAGCCCTGCCTGTCTCCCAGATCACTGTCCTTCTGCCATGGCCCTGTGG
ATGCGCCTCCTGCCCCTGCTGGCGCTGCTGGCCCTCTGGGGACCTGACCCAGCCGCAGCCTTTGT
GAACCAACACCTGTGCGGCTCACACCTGGTGGAAGCTCTCTACCTAGTGTGCGGGGAACGAGGCT
TCTTCTACACACCCAAGACCCGCCGGGAGGCAGAGGACCTGCAGGGTGAGCCAACCGCCCATTGC
TGCCCCTGGCCGCCCCCAGCCACCCCCTGCTCCTGGCGCTCCCACCCAGCATGGGCAGAAGGGGG
CAGGAGGCTGCCACCCAGCAGGGGGTCAGGTGCACTTTTTTAAAAAGAAGTTCTCTTGGTCACGT
CCTAAAAGTGACCAGCTCCCTGTGGCCCAGTCAGAATCTCAGCCTGAGGACGGTGTTGGCTTCGG
CAGCCCCGAGATACATCAGAGGGTGGGCACGCTCCTCCCTCCACTCGCCCCTCAAACAAATGCCC
CGCAGCCCATTTCTCCACCCTCATTTGATGACCGCAGATTCAAGTGTTTTGTTAAGTAAAGTCCT
GGGTGACCTGGGGTCACAGGGTGCCCCACGCTGCCTGCCTCTGGGCGAACACCCCATCACGCCCG
GAGGAGGGCGTGGCTGCCTGCCTGAGTGGGCCAGACCCCTGTCGCCAGCCTCACGGCAGCTCCAT
AGTCAGGAGATGGGGAAGATGCTGGGGACAGGCCCTGGGGAGAAGTACTGGGATCACCTGTTCAG

GCTCCCACTGTGACGCTGCCCCGGGGCGGGGGAAGGAGGTGGGACATGTGGGCGTTGGGGCCTGT
AGGTCCACACCCAGTGTGGGTGACCCTCCCTCTAACCTGGGTCCAGCCCGGCTGGAGATGGGTGG
GAGTGCGACCTAGGGCTGGCGGGCAGGCGGGCACTGTGTCTCCCTGACTGTGTCCTCCTGTGTCC
CTCTGCCTCGCCGCTGTTCCGGAACCTGCTCTGCGCGGCACGTCCTGGCAGTGGGGCAGGTGGAG
CTGGGCGGGGGCCCTGGTGCAGGCAGCCTGCAGCCCTTGGCCCTGGAGGGGTCCCTGCAGAAGCG
TGGCATTGTGGAACAATGCTGTACCAGCATCTGCTCCCTCTACCAGCTGGAGAACTACTGCAACT
AGACGCAGCCTGCAGGCAGCCCCACACCCGCCGCCTCCTGCACCGAGAGAGATGGAATAAAGCCC
TTGAACCAGCCCTGCTGTGCCGTCTGTGTGTCTTGGGGGCCCTGGGCCAAGCCCCACTTCCCGGC
ACTGTTGTGAGCCCCTCCCAGCTCTCTCCACGCTCTCTGGGTGCCCACAGGTGCCAACGCCGGCC
AGGCCCAGCATGCAGTGGCTCTCCCCAAAGCGGCCATGCCTGTTGGCTGCCTGCTGCCCCCACCC
TGTGGCTCAGGGTCCAGTATGGGAGCTTCGGGGGTCTCTGAGGGGCCAGG

ANSWER:

Homo sapiens insulin (INS) gene, complete cds

Sequence ID: AH002844.2 Length: 4969 Number of Matches: 1

GC CONTENT- 66.30952380952381%

3)

GTGAAACCCTAAGGAAACTTCGGCAAGCTCCAGAGAAACGAGAGTTCCGTAATCATTTTCTCTTG
TTGTTCCTGATCGCGTAGCTCAAGCGAAAAAAATGGCGTCGTTTGATGAAGCACCACCAGGAAAC
GCCAAGGCCGGTGAGAAGATCTTCAGGACCAAGTGTGCTCAGTGTCACACCGTCGAAGCAGGCGC
CGGTCACAAACAAGGACCCAATCTAAACGGTCTATTTGGAAGACAATCTGGTACAACTGCTGGTT
ACTCTTACTCTGCTGCTAACAAGAACAAAGCTGTGGAATGGGAAGAGAAGGCCTTGTACGATTAC
TTGCTCAACCCCAAGAAGTACATACCAGGTACCAAGATGGTGTTCCCTGGGCTAAAGAAGCCGCA
AGACCGTGCTGATCTCATCGCCTACTTGAAGGAATCTACTGCGCCTAAGTGAATCTGATGGTGGA
TTGATTCTGAGTTGTTAAGTCTCTCTCAGATGAGGCTTTTTTACTTTGCTATATTCTTTTGCCAA
ATAAAATCTCAAACTTTTTTTGTTTATCATCAATTACGTTCTTGGTGGGAATTTGGCTGTAATGT
GTGCTGAGGCTCACTTTATCGAGTACATTTGATTTTCTGAGGCTCATTTTCCTTTTTTTTGTCTA
GAAAGCATTTTCTCACTTATTATTGGTGCTTAAATTTGAAGGACAAAAAAGATTCGAATTATATA
TCAACTATTAACAAT

ANSWER:

Arabidopsis thaliana CYTOCHROME C-1 (CYTC-1), mRNA

Sequence ID: NM_102130.4 Length: 730 Number of Matches: 1

GC CONTENT- 41.99726402188782%

4)

TGTGTTGTGTCAGTGTGTTGTGTGTATAAGTGTGCGTGTGTGTGTGAGTGCTGGTAAGAAAACTG
AGAGAAAAGTGAAAAGTAACGACCGGCAAAAGCGCGAAAAACGAAAAACAAAAAAAACTTTCCCC
GCAGGAAACTCGAACTGCAAGCTGACGTTACAAGCGGTCAAAATTGGATTATGCTTAGGCACAAA
CGCAACTGCCACGCCATTCAGACGCCCAGCGACGCCGAGCATGTGAAGTTAAAGCCGCATTTTCA
TCCGCCCCAGTGGCTCCTGCACCGCGTCACCTTCTCTTTGGAGCTGTATCACAAGAATATCATCA
AGAAACTGCCCAGTCTTGGCCAATTTCACGTTTACCGGCTGACCAAGAACGTCTGCCAGACTTAA
GTAATACCCATAACAAATATCCCCATATAGTCCGCAATAAACTCCACAAAAAAGACAAAGTGCGT
TTAATAACCATTACAAAAAAAGTGTAACTGATTGGGAAGAAGTGTGCAACAAATATCCACAAAAT
CAAATACTCAAGTGCAATAAAAAAAGTAAAAGTGATTAAAGTGCGAAAAGAAAATGTGGCCAACC

ATTAAGGCCAAGATCAAGTTCTAAGTTCAAATAAACAGACGTAAAAAAAGACTAGAAAATCTAGC
GTGTTTTAAAGCGCTGGAAACTAAAATAACCCCCCCTGAAAGTAGTATAACCGAACGTACAAAAA
TGTCCACCGGCCGCCGTTTGGCCAAGCGCTCCATCATCGGCACCAAGGTGTGCGCCAAGGGTCCG
GATGGCCTCTGGTACTCCGGCACCATATCCGACGTGAAAACGCCGCCCTCGTACAGCGGACCGCT
CTCGCCGCCGCCGCCGCCCACTTTTGTGGTGCCCGGCGAGGCACCGATTAATGCCGATACGCGCT
ACCTGGTCCGTTTCGATTTCAAGACCGCCGTCGAGTCCCCAACCGCTACCACGTCGTCCGCGGCC
TCGACCTCGTCCACATCCTCCACAGATCCGTCGGTCATCGTGGAAACGCGTCGCGCTGCCAACGT
ACACATCAGTCCCGCTCAGGCACTGCGTCGCAGCGCCATGATCAAGGAGTTCCGCGAGTCGGATC
TTATTGGACCCGGATTCCGGTCCATCATGGACACCGAACTGCAGCCTGGCCAGCGGGTCTACTTC
ACCTACAATGGACGCGAGCAGAGCGGCGATGTCGTCAAACACGACGCTACCAAGGATGAGGTGAT
TGTCAAGATCACAACAGTTGGAAATGAGGAACCCATTGAGCTGAAGAAGCGACTGGAGGAAGTGC
GTCTGCTGGAATCGCGACGCTCCGCCCGTCTGGCAGACCAGGATCGCGACACGGACTTTGCCAGA
CTCGCCGACATGAGTGGCGAACGCCGCAGAACCACCACACACAGTATTGAGGTGCCATCGCAGCT
GACGGCGCAGCACAATTCCCGGAAACGTCCGCCCAGCGATCACCAGGACTACGGCAACTATCTGG
AAACATGCCGTGCCGCCGAGATTCTGTCATCGATGAAGTTGCAGAGTCCGCATGGCTGTAGGTCA
TCCTCCTTTTCCGACCCTGTCACACCCCCTTTTCGATCACGCCTACATATAAGCTAATTAATTCT
ATCCATTTCACCCCAGCAATGGCCGACAAGTGCTCGAGTCCCGGCAGCAGCTCTTCGGCTTCCTG
GAGCTCCGGTTCCCCGTCGCCGCCATTGAGTGACGACGGCCACGCCCACCACAGCCCACACAATA
TCATGTCGCCCCACGATGCGGACAACGCACGCACACGCACAGCATCCGTGTCCACGTCGGACGAG
GGCATTGTCATCGACTACAAGGAGGAGCGCAAGAAAAAGGTGGGTGATTCGATCTAAGGCCCCAA
CATCTAGATATAAGAAACATATAGAGATTGGTGTACAAGAATGCGGTCAGAAGAATCTGGGCTAA
CGGCGGTGGAGCGTGACATTTTGTTGCATTTTAATTGCAACTTTGTGTATAGATTTTAATTGCTA
TAATTATGTAAATGTCGGTCTGTTCTTGGCACGGCCACACGGCGTATGCTTGATGCCCAATACTC
ATACGCAATGTAGCGCTGCTGCTGCCGGCGAAAGAATACAGAATATATAGAATATCAAATAAATG
TCGACAATGATTCAAGCACAGGAGA

ANSWER:

Drosophila melanogaster glucose transporter 4 enhancer factor, transcript variant C (Glut4EF), mRNA

Sequence ID: NM_001144557.2 Length: 3418 Number of Matches: 1

GC CONTENT- 51.12851220635652%

5)

AAACATCGAGGGATTGGATATTGGCGTGTTAGTGAACAATGTCGGGATTCTGCCCAGCCAAATAC
CCTGCAAGCTCCTTGAAACATCTGACTTGGAAGAAAGAATATATGACATTGTCAACTGCAATGTA
AAGTCCATGGTTAAGATGTGCAGAATTGTACTACCAGGAATGCAGCAGAGAAGAAGAGGAGTCAT
TCTGAATGTGTCTTCTGGAATAGCCAAAATACCATGTCCCATTTACACCTTGTATGCAGCATCAA
AGGTTTTTGTTGAGAGATTTTCACAAGGTCTTCAAGCTGAATATATATCCAAGGGTATTATTATT
CAGACAGTGGCTCCATTTGGGGTTTCAACCGCAATGACAGGACATCAGAAGCCAGATATGGTCAC
ATTCACGGCTGAGGAGTTTGTGAGAAGTTCGCTGAAGTACCTGAAGACTGGTGACCAAACGTATG
GCAGCATCACTCATACTTTACTGGGCAGGATCGTGCAGTCCATTCCTACCTGGGTCCTGCAGAGT
GAAACATTTCAGCATCACTTTCAGGAATATGTGAAGAACAGGGACAGAAGATGAGAGATGGCATT
CTCCGACTTTATACTGTATATAGTATTGCACATTTGATATGTGTGTTTCTTTGCACTAATTAAAA
CTGTGTGTAAAAAAAAAACGTAAGACTGGAAAAGAAAAATGACAGGCCTCTGTTTTTCCATGGTC
CTTCAAAATATGCTAAATCAGTGTTGATAATGGAATCATTATTAATGGTAATCATATCAGCAGAC
TGGAGATAGAGGAGTAGTACTGACCTTGATAACATTAACGGAAGGTCAGTTTCACAAAGGCCAAA
TCACAGAGTCAGACATGTGACCTTGTTGTTGTTTTTATTATGTTTTCTTCCAGATTAGAACGTGT
TAAGGCTTATATATTTTCAAACCATGGTTGCATTGCAAACAACATCCAAAAAACACATATTTGGC
GCCACGCAGTGGTTAAATTTGGTTAAATCATCTTTAAAAGCTGATGAAATGAAATGTAATAATTT
TGTCATTACACTGTAAAAACAAAAACAAAACAAAAAAATAATAAAAATAAATAAATGGGTTCCAC
ACAATTAATTTGTGTTGGGGCAAAATGAAAAAAAAATTAAGCTAAGTTATTATTATTATTATTAT

TTTTATTTTATTTTTTTACAAATTTAAGTTGATTGAATATGAAACAATTAAGTAGCCAACCCCTC
AAAAATTGTGTTGTTTAAGTTCAATTTAAATAGGTAGTATGAACAAACAGCAAAGTGAAAGCCAG
TATTTTACTTTCATGTGATTAAATTCTCTGTAGCCACTTGAGGAAAATGCAAACCCTTTTTGTGT
AGTTAATTATATTATTATTGTATACCAACATATCATAAAGGAAAAAAGGATTTGAAGAATGACAT
TAGAAAAAAGAAATTCTAAATCACTTGAAATTTTCAATGC

ANSWER:

Danio rerio hydroxysteroid (17-beta) dehydrogenase 3 (hsd17b3), mRNA

Sequence ID: NM_200364.1 Length: 2132 Number of Matches: 1

GC CONTENT- 34.67029231815092%