1. ATGACCGAGTACAAGCTTGTGGTGGTGGGAGCTGGTGGTGTGGGGAAGAGTGCGCTGAC CATCCAGCTCATCCAGAACCACTTTGTGGACGAGTATGACCCCACCATCGAGGACTCGT ACAGGAAGCAGGTGGTGATCGACGGCGAGACGTGCCTGCTGGACATCCTGGACACTGCG GGTCAGGAGGAGTACAGCGCCATGCGGGACCAGTACATGAGGACCGGAGAGGGCTTCCT CTGCGTCTTCGCCATCAACAACACCAAGTCCTTCGAGGACATACACCACTACAGGGAGC AGATCAAGCGGGTGAAGGACTCCGAGGATGTTCCCATGGTGCTCGTGGGGAACAAGTGT GACCTGCCCTCGCGCACGGTGGACACCAAGCAAGCTCAGGACCTGGCCCGCAACTACGG CATCCCCTTCATCGAGACCTCTGCTAAAACCAGACAGGGTGTGGACGACGCCTTCTACA CGTTAGTGCGGGAAATCCGCAAGCACAAGGAGAAGACCAGCAAAGAGGGGAGGAAGAAG AAGAAGAAGAAGTCGAAGGCCAAGTGCGTGGTCATGTGA

Anguilla anguilla Ras – fresh water eel

56.6265060240963

1. GGACTGGGGACAGGGGTCCTGGGGACAGGGGTCCGGGGACAGGGTCCTGGGGACAGGGG TGTGGGGACAGGGGTCTGGGGACAGGGGTGTGGGGACAGGGGTGTGGGGACAGGGGTCT GGGGACAGGGGTGTGGGGACAGGGGTCCGGGGACAGGGGTGTGGGGACAGGGGTCTGGG GACAGGGGTGTGGGGACAGGGGTGTGGGGACAGGGGTCTGGGGACAGGGGTGTGGGGAC AGGGGTCCTGGGGACAGGGGTGTGGGGACAGGGGTGTGGGGACAGGGGTGTGGGGACAG GGGTGTGGGGACAGGGGTCCTGGGGATAGGGGTGTGGGGACAGGGGTGTGGGGACAGGG GTCCCGGGGACAGGGGTGTGGGGACAGGGGTGTGGGGACAGGGGTCCTGGGGACAGGGG TCTGAGGACAGGGGTGTGGGCACAGGGGTCCTGGGGACAGGGGTCCTGGGGACAGGGGT CCTGGGGACAGGGGTCTGGGGACAGCAGCGCAAAGAGCCCCGCCCTGCAGCCTCCAGCT CTCCTGGTCTAATGTGGAAAGTGGCCCAGGTGAGGGCTTTGCTCTCCTGGAGACATTTG CCCCCAGCTGTGAGCAGGGACAGGTCTGGCCACCGGGCCCCTGGTTAAGACTCTAATGA CCCGCTGGTCCTGAGGAAGAGGTGCTGACGACCAAGGAGATCTTCCCACAGACCCAGCA CCAGGGAAATGGTCCGGAAATTGCAGCCTCAGCCCCCAGCCATCTGCCGACCCCCCCAC CCCGCCCTAATGGGCCAGGCGGCAGGGGTTGACAGGTAGGGGAGATGGGCTCTGAGACT ATAAAGCCAGCGGGGGCCCAGCAGCCCTCAGCCCTCCAGGACAGGCTGCATCAGAAGAG GCCATCAAGCAGGTCTGTTCCAAGGGCCTTTGCGTCAGGTGGGCTCAGGGTTCCAGGGT GGCTGGACCCCAGGCCCCAGCTCTGCAGCAGGGAGGACGTGGCTGGGCTCGTGAAGCAT GTGGGGGTGAGCCCAGGGGCCCCAAGGCAGGGCACCTGGCCTTCAGCCTGCCTCAGCCC TGCCTGTCTCCCAGATCACTGTCCTTCTGCCATGGCCCTGTGGATGCGCCTCCTGCCCC TGCTGGCGCTGCTGGCCCTCTGGGGACCTGACCCAGCCGCAGCCTTTGTGAACCAACAC CTGTGCGGCTCACACCTGGTGGAAGCTCTCTACCTAGTGTGCGGGGAACGAGGCTTCTT CTACACACCCAAGACCCGCCGGGAGGCAGAGGACCTGCAGGGTGAGCCAACCGCCCATT GCTGCCCCTGGCCGCCCCCAGCCACCCCCTGCTCCTGGCGCTCCCACCCAGCATGGGCA GAAGGGGGCAGGAGGCTGCCACCCAGCAGGGGGTCAGGTGCACTTTTTTAAAAAGAAGT TCTCTTGGTCACGTCCTAAAAGTGACCAGCTCCCTGTGGCCCAGTCAGAATCTCAGCCT GAGGACGGTGTTGGCTTCGGCAGCCCCGAGATACATCAGAGGGTGGGCACGCTCCTCCC TCCACTCGCCCCTCAAACAAATGCCCCGCAGCCCATTTCTCCACCCTCATTTGATGACC GCAGATTCAAGTGTTTTGTTAAGTAAAGTCCTGGGTGACCTGGGGTCACAGGGTGCCCC ACGCTGCCTGCCTCTGGGCGAACACCCCATCACGCCCGGAGGAGGGCGTGGCTGCCTGC CTGAGTGGGCCAGACCCCTGTCGCCAGCCTCACGGCAGCTCCATAGTCAGGAGATGGGG AAGATGCTGGGGACAGGCCCTGGGGAGAAGTACTGGGATCACCTGTTCAGGCTCCCACT GTGACGCTGCCCCGGGGCGGGGGAAGGAGGTGGGACATGTGGGCGTTGGGGCCTGTAGG TCCACACCCAGTGTGGGTGACCCTCCCTCTAACCTGGGTCCAGCCCGGCTGGAGATGGG TGGGAGTGCGACCTAGGGCTGGCGGGCAGGCGGGCACTGTGTCTCCCTGACTGTGTCCT CCTGTGTCCCTCTGCCTCGCCGCTGTTCCGGAACCTGCTCTGCGCGGCACGTCCTGGCA GTGGGGCAGGTGGAGCTGGGCGGGGGCCCTGGTGCAGGCAGCCTGCAGCCCTTGGCCCT GGAGGGGTCCCTGCAGAAGCGTGGCATTGTGGAACAATGCTGTACCAGCATCTGCTCCC TCTACCAGCTGGAGAACTACTGCAACTAGACGCAGCCTGCAGGCAGCCCCACACCCGCC GCCTCCTGCACCGAGAGAGATGGAATAAAGCCCTTGAACCAGCCCTGCTGTGCCGTCTG TGTGTCTTGGGGGCCCTGGGCCAAGCCCCACTTCCCGGCACTGTTGTGAGCCCCTCCCA GCTCTCTCCACGCTCTCTGGGTGCCCACAGGTGCCAACGCCGGCCAGGCCCAGCATGCA GTGGCTCTCCCCAAAGCGGCCATGCCTGTTGGCTGCCTGCTGCCCCCACCCTGTGGCTC AGGGTCCAGTATGGGAGCTTCGGGGGTCTCTGAGGGGCCAGG

**Homo sapiens insulin (INS) gene, complete cds**

65.19703472493173

1. GTGAAACCCTAAGGAAACTTCGGCAAGCTCCAGAGAAACGAGAGTTCCGTAATCATTTT CTCTTGTTGTTCCTGATCGCGTAGCTCAAGCGAAAAAAATGGCGTCGTTTGATGAAGCA CCACCAGGAAACGCCAAGGCCGGTGAGAAGATCTTCAGGACCAAGTGTGCTCAGTGTCA CACCGTCGAAGCAGGCGCCGGTCACAAACAAGGACCCAATCTAAACGGTCTATTTGGAA GACAATCTGGTACAACTGCTGGTTACTCTTACTCTGCTGCTAACAAGAACAAAGCTGTG GAATGGGAAGAGAAGGCCTTGTACGATTACTTGCTCAACCCCAAGAAGTACATACCAGG TACCAAGATGGTGTTCCCTGGGCTAAAGAAGCCGCAAGACCGTGCTGATCTCATCGCCT ACTTGAAGGAATCTACTGCGCCTAAGTGAATCTGATGGTGGATTGATTCTGAGTTGTTA AGTCTCTCTCAGATGAGGCTTTTTTACTTTGCTATATTCTTTTGCCAAATAAAATCTCA AACTTTTTTTGTTTATCATCAATTACGTTCTTGGTGGGAATTTGGCTGTAATGTGTGCT GAGGCTCACTTTATCGAGTACATTTGATTTTCTGAGGCTCATTTTCCTTTTTTTTGTCT AGAAAGCATTTTCTCACTTATTATTGGTGCTTAAATTTGAAGGACAAAAAAGATTCGAA TTATATATCAACTATTAACAAT

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

**Arabidopsis thaliana – Thale cress**

41.263440860215056

4. TGTGTTGTGTCAGTGTGTTGTGTGTATAAGTGTGCGTGTGTGTGTGAGTGCTGGTAAGA AAACTGAGAGAAAAGTGAAAAGTAACGACCGGCAAAAGCGCGAAAAACGAAAAACAAAA AAAACTTTCCCCGCAGGAAACTCGAACTGCAAGCTGACGTTACAAGCGGTCAAAATTGG ATTATGCTTAGGCACAAACGCAACTGCCACGCCATTCAGACGCCCAGCGACGCCGAGCA TGTGAAGTTAAAGCCGCATTTTCATCCGCCCCAGTGGCTCCTGCACCGCGTCACCTTCT CTTTGGAGCTGTATCACAAGAATATCATCAAGAAACTGCCCAGTCTTGGCCAATTTCAC GTTTACCGGCTGACCAAGAACGTCTGCCAGACTTAAGTAATACCCATAACAAATATCCC CATATAGTCCGCAATAAACTCCACAAAAAAGACAAAGTGCGTTTAATAACCATTACAAA AAAAGTGTAACTGATTGGGAAGAAGTGTGCAACAAATATCCACAAAATCAAATACTCAA GTGCAATAAAAAAAGTAAAAGTGATTAAAGTGCGAAAAGAAAATGTGGCCAACCATTAA GGCCAAGATCAAGTTCTAAGTTCAAATAAACAGACGTAAAAAAAGACTAGAAAATCTAG CGTGTTTTAAAGCGCTGGAAACTAAAATAACCCCCCCTGAAAGTAGTATAACCGAACGT ACAAAAATGTCCACCGGCCGCCGTTTGGCCAAGCGCTCCATCATCGGCACCAAGGTGTG CGCCAAGGGTCCGGATGGCCTCTGGTACTCCGGCACCATATCCGACGTGAAAACGCCGC CCTCGTACAGCGGACCGCTCTCGCCGCCGCCGCCGCCCACTTTTGTGGTGCCCGGCGAG GCACCGATTAATGCCGATACGCGCTACCTGGTCCGTTTCGATTTCAAGACCGCCGTCGA GTCCCCAACCGCTACCACGTCGTCCGCGGCCTCGACCTCGTCCACATCCTCCACAGATC CGTCGGTCATCGTGGAAACGCGTCGCGCTGCCAACGTACACATCAGTCCCGCTCAGGCA CTGCGTCGCAGCGCCATGATCAAGGAGTTCCGCGAGTCGGATCTTATTGGACCCGGATT CCGGTCCATCATGGACACCGAACTGCAGCCTGGCCAGCGGGTCTACTTCACCTACAATG GACGCGAGCAGAGCGGCGATGTCGTCAAACACGACGCTACCAAGGATGAGGTGATTGTC AAGATCACAACAGTTGGAAATGAGGAACCCATTGAGCTGAAGAAGCGACTGGAGGAAGT GCGTCTGCTGGAATCGCGACGCTCCGCCCGTCTGGCAGACCAGGATCGCGACACGGACT TTGCCAGACTCGCCGACATGAGTGGCGAACGCCGCAGAACCACCACACACAGTATTGAG GTGCCATCGCAGCTGACGGCGCAGCACAATTCCCGGAAACGTCCGCCCAGCGATCACCA GGACTACGGCAACTATCTGGAAACATGCCGTGCCGCCGAGATTCTGTCATCGATGAAGT TGCAGAGTCCGCATGGCTGTAGGTCATCCTCCTTTTCCGACCCTGTCACACCCCCTTTT CGATCACGCCTACATATAAGCTAATTAATTCTATCCATTTCACCCCAGCAATGGCCGAC AAGTGCTCGAGTCCCGGCAGCAGCTCTTCGGCTTCCTGGAGCTCCGGTTCCCCGTCGCC

GCCATTGAGTGACGACGGCCACGCCCACCACAGCCCACACAATATCATGTCGCCCCACG ATGCGGACAACGCACGCACACGCACAGCATCCGTGTCCACGTCGGACGAGGGCATTGTC ATCGACTACAAGGAGGAGCGCAAGAAAAAGGTGGGTGATTCGATCTAAGGCCCCAACAT CTAGATATAAGAAACATATAGAGATTGGTGTACAAGAATGCGGTCAGAAGAATCTGGGC TAACGGCGGTGGAGCGTGACATTTTGTTGCATTTTAATTGCAACTTTGTGTATAGATTT TAATTGCTATAATTATGTAAATGTCGGTCTGTTCTTGGCACGGCCACACGGCGTATGCT TGATGCCCAATACTCATACGCAATGTAGCGCTGCTGCTGCCGGCGAAAGAATACAGAAT ATATAGAATATCAAATAAATGTCGACAATGATTCAAGCACAGGAGA

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

**Drosophila melanogaster -** Common fruit fly

51.32183908045977

1. AAACATCGAGGGATTGGATATTGGCGTGTTAGTGAACAATGTCGGGATTCTGCCCAGCC AAATACCCTGCAAGCTCCTTGAAACATCTGACTTGGAAGAAAGAATATATGACATTGTC AACTGCAATGTAAAGTCCATGGTTAAGATGTGCAGAATTGTACTACCAGGAATGCAGCA GAGAAGAAGAGGAGTCATTCTGAATGTGTCTTCTGGAATAGCCAAAATACCATGTCCCA TTTACACCTTGTATGCAGCATCAAAGGTTTTTGTTGAGAGATTTTCACAAGGTCTTCAA GCTGAATATATATCCAAGGGTATTATTATTCAGACAGTGGCTCCATTTGGGGTTTCAAC CGCAATGACAGGACATCAGAAGCCAGATATGGTCACATTCACGGCTGAGGAGTTTGTGA GAAGTTCGCTGAAGTACCTGAAGACTGGTGACCAAACGTATGGCAGCATCACTCATACT TTACTGGGCAGGATCGTGCAGTCCATTCCTACCTGGGTCCTGCAGAGTGAAACATTTCA GCATCACTTTCAGGAATATGTGAAGAACAGGGACAGAAGATGAGAGATGGCATTCTCCG ACTTTATACTGTATATAGTATTGCACATTTGATATGTGTGTTTCTTTGCACTAATTAAA ACTGTGTGTAAAAAAAAAACGTAAGACTGGAAAAGAAAAATGACAGGCCTCTGTTTTTC CATGGTCCTTCAAAATATGCTAAATCAGTGTTGATAATGGAATCATTATTAATGGTAAT CATATCAGCAGACTGGAGATAGAGGAGTAGTACTGACCTTGATAACATTAACGGAAGGT CAGTTTCACAAAGGCCAAATCACAGAGTCAGACATGTGACCTTGTTGTTGTTTTTATTA TGTTTTCTTCCAGATTAGAACGTGTTAAGGCTTATATATTTTCAAACCATGGTTGCATT GCAAACAACATCCAAAAAACACATATTTGGCGCCACGCAGTGGTTAAATTTGGTTAAAT CATCTTTAAAAGCTGATGAAATGAAATGTAATAATTTTGTCATTACACTGTAAAAACAA AAACAAAACAAAAAAATAATAAAAATAAATAAATGGGTTCCACACAATTAATTTGTGTT GGGGCAAAATGAAAAAAAAATTAAGCTAAGTTATTATTATTATTATTATTTTTATTTTA TTTTTTTACAAATTTAAGTTGATTGAATATGAAACAATTAAGTAGCCAACCCCTCAAAA ATTGTGTTGTTTAAGTTCAATTTAAATAGGTAGTATGAACAAACAGCAAAGTGAAAGCC AGTATTTTACTTTCATGTGATTAAATTCTCTGTAGCCACTTGAGGAAAATGCAAACCCT TTTTGTGTAGTTAATTATATTATTATTGTATACCAACATATCATAAAGGAAAAAAGGAT TTGAAGAATGACATTAGAAAAAAGAAATTCTAAATCACTTGAAATTTTCAATGC

**Danio rerio hydroxysteroid (17-beta) dehydrogenase 3 (hsd17b3), transcript variant X1, mRNA**

**Danio rerio -** Zebrafish

34.11371237458194