

# 1 Data

The sequence data used to train and evaluate the LDA model described in this work are detailed below. This file contains the upstream sequences from the training set.

A note on the identifiers used for each sequence: where possible, we have used the GenBank accession number as the identifier. For example, the sequence marked as AC07862.6\_1 represents the BAC with GenBank accession number AC07862.6 and the \_1 indicates an ORF within that BAC. If an identifier is of the form AF031926\_1, then this indicates that it is the first entry in a GenBank record that contains multiple cds entries. GSS identifiers are drawn directly from dbGSS. Genomic contig ids are exactly those used by the Sanger Institute's sequence database. For ORFs drawn from Chromosomes I and II, the identifiers used by the Sanger Institute and The Institute for Genome Research (TIGR) were used without any modification.

## Non-coding regions - Training Set

AC007862.6.1up EST mapping

TGTTGGGTCATTTACAAAGTAGTGCTGGTTCGCTGCAAG  
TGATGAGGAATTGCCAAATAACGCCCTATTTTATGATTGC  
GCTGTCCCTCCTGGTAATATTTGTAGTGACGCGGTTACTG  
GGGATGTTATTGGGAGA ACTATCGCTGCCTGTGATTTT  
CAACAGAACAGTTTCATTATGGAATATTAATGATGTTTGA  
GGTAGCGCATGTACTGAATGTATTGTGCGATCGTGTCACT  
ATCGTTGAAAGGTCCAAACACGTTTCCCGACCTTTTGT  
AAAAGCTGTAGTTCATTCATTCCTTTGATCGTTATTGTTA  
TTATTATTATTATTTATATTTTCTCTTGCATTGTTGGGTA  
CACCTTTCTCCTTCTTTATGCTTTCTTTCTTTCTTTTTT  
TTTTGAACATAG

AC007862.6.329up sequenced from RT-PCR results

TGTGGGTGGATGTTTGAATAAATAAACATATATTTTTTTG  
TATATTTGTGCGTACATGTGAATGTGGTGTGCCCCCTCG  
CAGTTCACCGCAGCGTGCTTTCGGTTTTGAGCCTAGTGGG  
TTAGTTTCTGTGAATTGTTCGGGCTCACTTGCGGATGCAG  
GAGGATTTTCGGCAACCATAACAGTAATAATCAGATGAAAT  
GGCGGGGAAACATTGTCCCTAAACAATAACCCTTTGAAAAC  
ATTTGTGCGAGCTTCTCAGCACACAAATGCACTTTGAACT  
ACGTTTGTGTTTGTCTGTGTGTGGCGTTTAGTACCTAAATC  
TATTTGCCTTTTGCTTACCGCAGCTGCGTCCTGTTTGTTC  
GTGTTATTTTTTGGCATCATTCGGAGGGAAG

AC007863.14.280up sequenced from RT-PCR results

TGTCACCCGTTGATAGCAGAATGTTTCGTGAGGTACCGCGA  
CGGTACAAGTTTACAAACGCGTCCACGCATATATGTCTGT  
ATGAAGTCTCTGACTGCACGTTGAGTGGTGTGTTTTGTTTC  
TGCGTCTCCCTCCTGCCATGAGTGTGCGGTTGTTTTTTTC  
ATCCTTTTTGACCGTTCCCTATTTCCCGTGTATCTGCCTT  
TCTTTTTGCGGTGCAG

AC007866.10.029up sequenced from RT-PCR results

GTGCATAATGTCTCCCTGAATTATGTA ACTCAACCCTCTT  
TTTCATTTTCTTTCCCTTTTACATTCACATATAAAAAAAAA  
ATGCGTATATATACACACACACATATATATATATATATAT  
ATATATATATATTTATTTATTTATTATTTCTTGTGTTATA

A

AC012647.17.195up sequenced from RT-PCR results

CTTTGTTTGCCTCGACATGTTGTTTTTCACAGGCGGAGCTA  
ATGTGGTGGGTTGCACCGTTTGGAGTTAACGGGACTACGT  
GTGATAGATGCTGCACATGCATCACAATTTCCCTGTTGAC  
GTTTGTCTCATCACTCTTTTTTTTTTTCCTACTAAAGCTGCT  
GCTATGTTTACGGTCGTATAGTGTGTTTTTCCTACTTGTA  
CGACATACGCATACAGATACACACATATGTTTATATATAT  
ATATATATTTGTTTATTTATTGAATATCAGTTACAAAATT  
CTGATTCTTCTCCCCCATTTTATTTTTTTTAG

AC013485.2.081up sequenced from RT-PCR results

TATGCTATGTTGCCACCGGATCCTGATCGCACCCCTAGTGT  
TTACTTCCCTCATCTTGTTTGTATTGTGCCTTTCGTACTTT  
TGTCTTTTCCACCTTCGGGCTGCTTAG

AC073906.5.1up EST mapping

CAGGCTGGTCCCACACCAGTGAGGTGGCGTAGTCTTGGGT  
TGCGCTTACCTTGTGATTGGTGTTCCTCGTTCATTATTG  
CTTGGTTTTTTTTTTTTTATTTCCCTTCCCTTTTTACTCCCC  
TCAATTCTATCTTCTTCGGCGAGCGGCTGTGTAGTGGAAC  
TGTAATACACCTGGAGGGCATGTGCGTGTGGTATGTGCAT  
AGCAGAATGTGCTGCGCTCCGGTACAGTGAGTGCTGATGC  
CGTCTTAGCCACGCGTGTGTTTTTTTTATTTATTCCTTGGA  
CGTCATTGCTGTAACCTCCCTCTTTGCAACTCACGTGCTGT  
GTAAGTGTGTCGTGACTCACTTCTTCTGCATCACAAAGC  
TTTTCCCCATTTATATTACTTTTTTACCGTTTGCACGCGCA  
G

AC084046.11.1up EST mapping

CTTTTTCTTTTGGCGTGTGTATGTGTATGTGCCTGCATACA  
CCTGTGGAACGGGGTTTGTGATCATATTCTGGCTCGTCGG  
TTTTTTTTTTGGAGAGTGGAAGTGCAACCCCGTGCAAATT  
CTTATATTTTTCTTTCTTTTCTCGTGAAACAGTGATGGAC  
ACGTTTCATCGAACAAGGGGGAAAAAATAAACGGGGA  
ACAATGCAAAAACCTTACGACCCGCACTAACCGGTTAGGG  
CCCCGCAATGCACTTGCCTTTTCCCTCGTGGATGTCATCTC  
TGACTCCACCCACAGAGCGCCCTGTAAGTTGTTGCCTGA  
TAACAACCTTAAACCATTTCTCCTGTCAACCCACTCCCTCTT  
TCATGATATGTCCTACCGCTTTTATTGACCATGATGACAA

g

AC087327.6.1up EST mapping

AATTGTATGAAAATGCCAATTCccccccccccaaggtaat  
CATCGAGAGATCGTCATGTTTAGAGACGATTGTCGTGTTT  
CACATTGTGTTTTAGTGCTATTGCAAGTATCATTACACTC  
GAGGCGAAACACTGTGGAAGGTAAGGAGAGAGTATGCACC  
TCAGGCACATGAAGCCTGTTTCGGCTGCTCTCTGTAATTA  
ACCTCCCTTCCCTTTGGTTTCTTCGCCCAATGTTTCTCCC  
CATGCGTAATTATGCGCAACGGCAGAGCCTCATTAAATAC  
CTTTGTATTACCACTTCGGTGGTTATTACACGTTAGTTTC  
TGTCTGTATAACCTTGGTTGTGTGACAGAAGTGA CTCTCC  
TCAACTTCTTCTTCCCTCCCTTATCTTTTTAATTTGGAGTA

AC091526.5.1up EST mapping

GAGATGTCTGTGGGTCGTGGTGTAGAAAGGGGGAGTTTT  
CGAGGCAACCGGGAGGAGTATAGGGAGGAAAATAGTACCC  
TAATGGGATGTTTTGTGTGTGGAAGGGGGTGGGGTGAATA  
AGCGGTGCCGTGAAGAAATGAAAGGAGCTGCAAGTCGGAA  
GGCACTTCCCCACACGACTGTTCCCTGCGTTGATGAGAGGT  
GCATCTTATCACCGAATGCTTTCGCAGAATGTCCCTGACT  
CCATTTTTAAGGCCTCATCTGACTATGTGTTGAAGAAA  
TTTCATTCGCCCCGAGGGCGACCCACCGCCACCGGCGCA  
CTCTTGCTTATCGTTTTTACTGTGGTTCGCGCTGCCATACT  
ACATCTTACACCGTTTCCACTCACTTTTGGCGTAATATCC  
TCTAAG

AC091701.2.137up sequenced from RT-PCR results

TTTGTACCATATTTCCCCTTTTCCGGCCCTCCATACCCGT  
GGACTCTTCTGCACCCTCATCTTTGTTCTTTTTCTTGCTC  
TTCGTGCTATATTGACCATGCAAACACGGTCGTGCCTCCA  
AG

AC091701.2.185up sequenced from RT-PCR results

GGAGCGTTAAACAGGAAGTAATAATCGTGGATTTGCGATG  
CACCTAGTTGAGTTCTACCCGTCACGCAGCCGTAAGACGT  
GGCGGTTCCCTAAGACTTGCTGCGAAATAGTTTTTTCGCAG  
CCGCTTGTTTTTACTGCACCCATCAA ACTGATTGCACGGT  
CTACTATGCTCTATTTAG

AC092736.2.1up EST mapping

TGATGATGACAAGGGAATGTCAGGAAAGAGAAAAGGAGGA  
AGTGGAGGAGGGATGATGATGATAATAATAATAATAT  
GGATGATGCGACTCTTGGTCTCACCACCTTATGTTGAGTC  
CTAGGAACCTGCTGTTGGTTTGTCACTATAATGGGAAGGTG  
TGTCTAGTGTGTGAGGATATGCTTGACTGTTTAATTATGC  
AACAAACGCTTAAATTCATTCAAGTCGCATCGTTTCTTTAC  
CACATCTAACAATTATGAGTGTTTTTACTCTCTGTATGTT  
TGTTGCGTGATATGTGTGTGCTCATTATAGAAAGTGCTGC  
ACTTGCGCTCCCATTTCAATCGTAATCCATTTCACTCTTT  
TTCTTTTAATTCTTTCTTACCATTTCTCATTTTGAAACAA  
CAAAG

AC093543.2.1up EST mapping

ACACTTCTGGAGCAGTTTGGCTTTTCTTGAGCGCTTTTTT  
TTCTCTTTTGGACGAAAACACCCATTCCCTGCACTGTAAG  
TATGTGGTGGTGAAGAAGTTAGGGAGTACGTAACCTGTTGA  
GGCGCAACTCCTGCTCAGATATGAAAGCCCATGGTGATGA  
TGATGTCGACCATCGAGAAGTGTGAGTTGACAGTGGCGCA  
ATCGCCTTTATGTTTTCTCTGTCTTGCAATGTAAACATGG  
GCGGTTGAAATTTTTCTCTCTTAGTTCACCGTTCAGTGTA  
AAATTACCATCTAGTTGTCTATGTGCATGCACTTGACCCT  
ATTGTACCTATTGCTGTTTTCCCTTATGATAAACAAAAAAT  
CATTTCCCTCTTTCTCCTAAAAAAAATAATAATAATCCA

g

AC103580.3.1up EST mapping

AGAGTCACCTCATCGTGGCGAAGTCGCTGCAGCTAAACAG  
TTTCCCGTCCCTTTTTCTCTTCTCCACCCATATAACCGTGT  
TTGAGAGTTTGCTTAACTTGTAGCAAATACGTCGGGTGTG  
TGTGTGTGGGGACAAGAGGGGACAGTGTGGGTTATGAAGG  
GGAGAGATAGAGGGAAAGGGGTTGAAATCTGTGGCGAAGA  
ACAAAAACTTGGGTCATTTTGTGCACGATGTATTGCGTTG  
TCGTGGTGGACTAATCCTCTTGGTGCATGCCATTCCGGCC  
CTCGTTGCAAGGGGTAATGTTGGCTATTCGGGCTGCGCTT  
TACCGCGTGCCCGCTGTTTTTACATATTTCCATTTTTTAC  
TTTAATTACCTCTTCGCTTCACGCTTCTGTTTATGTGCCG  
TCTAG

AF008186up sequenced from RT-PCR results

AGGGAGATAAGCAGTTTTGTGAAGCGTGTGGATACATGA  
CGGCCCTCCCGTTGTTGGAAGTCCGTGGACCATTTGGACC  
ACATTTACATTTAACCTAGGAGGGCCACCTGTAATCGAC  
ACTTTTCCCCGTCTTGGACGTATTGCATGTGCTGTCAAAC  
ATCAAAGCGTAAGTGACATTAAGCTGACAATGTATGCG  
TACAAAGGTACGCGTAACTACGTGTTTTTTCTATTCTTC  
CTCATTTTCATCTTTCATCTTTCATCTTTTTTTGACTTTTCA  
TTTTCAAACAAAAATGAACAAAAACCTAAATAATAATGT  
GTACACGCACACAG

AF011787up sequenced from RT-PCR results

GTTGGGACAACCTCCCGGTGTGTGCGTGAAGGGAAGAAAAT  
GTTGGAATGACTATGGGATACTGGATAACATAAGGCAGAGA  
GACAATCAGTGCCTGGATAACAGAGTAACGCTCTCGCTCT  
TTTGCTCCCTGTGACTGAAATGGGCAGAAGAACCTGCGAC  
TAAGTTTATGCATGTGTGCGCACCATTTTTTTTTTTTCGT  
ATTGATTTGCTTGGTGAGTCCATTTGTTCTCTTCTTTGCA  
CTACCTAAGGGGTATTTCCCTTCTTCTTCCCCTTCCCT  
GCACAAACGTACGGCAATCTTTCTGTTTGTGTTGAGCACT  
TCCGCTTCAGCAGGCACTTGCATTCTCATTTCATTGTTTTT  
TCTTCCCTTCGTATTTTGGTTTGGCTTAACAG

AF020696up sequenced from RT-PCR results

TGCTTATTTTCCCGACCGTCACAAGGCACAAGTGGTGGTA  
GGAAGGCTCTGATGCTTTGCGGGCTGCAGGCTTGAATTCC  
AGCCTATTTGCTCTCAACTTGGACCCGAGCTTTCTGAAAC  
TACCCTCCGGGGCATGTTAAACGCATATATCGTAGTCGCG  
GCTGCGTGCCCCCGTAAGAGTGCCGTTTAAACAGGGAGTTG  
ATCCGCTTATATTTGCTTTGTGGTGCGACACCGAAGAGGC  
GATGTGGCCTGTAAATGGTACAAACATCAGACTCATAACA  
TTGACTTTGAGGCGGTACGACTTTTTTAATTCATCGCCTTA  
TTCGCGCCTCTTGATGCCCTTAg

AF027739up sequenced from RT-PCR results

TATCGAAATGTTGTTTAGTAGCGCTCGTTGGTAACTTGT  
ACACTTTTTTTCTAATAGGGGAGCAAAAGTTATTGCAACTC  
TTATTTGTTCTTGGCGATCTAGTTCTATCCGTTTCTGTGC  
TCGCCTCCGTGTGTATAGGTTTGCATGTGTTTGATAGCCG  
CTTGTTTTTTCTTGTCGCTTGCTTATACTTCCTTACACTT  
TACTTTACTGCTAATGCTAATGCTCTTGACACTACTAAAG

AF028726.0up EST Mapping

TCCGTTGCAAGGTTTGGCTCTGCGGTGGTGCTGCGGTCGG  
TTGCCGACCTCTTCTTCGATGTTGCTCTTGCGATTCGGCA  
TCTGACGATGGGGGAAATGTTGTCATTGCGTCGTGTATGT  
GATGATGAAGCGCTCATTACTGTTCCCAGAGCAGTTGGAA  
TCCGGCTTCTTGAAGTACTTTCAGAGGGTCCAGGCCTTCA  
AGTAACTGTGCGCGTGGTGAAGAAGAACAAAACGGTTGG  
AAGGTTACCGAACAATCTCAGTGCGTTAGCTATTATTTAT  
CCGTGCACAAACCCCGTGCGCAGGTGATGGTGGATGGTGA  
GAACCTACAATTGGTGAAGAAGCATGAGGTATTGCGCAGC  
ATGGCAAACATGATGGAACACACCAACGCAAAAGTGGCAG  
GATTCGTCGACCCGTTTGGTAATGTCCTTATTCCTAGACA  
ATGACCAGGACGGGGAGCGCGACAAGGTTAAGTGATGGTT  
TCTTCCACCATGTCACCACTGGTGCGGGAGCGACGTGCCA  
ATTCATTTGATTCCCCCCTTACATTTGTGCAGTCATTTG  
TTTATCCTAGAACCAACTTCTACCTGTAACACTTTTTCCC  
CTTTATCGTTTTTTCTTTTCTTTTCTTTCCATTACGCCACT  
TTTCATTTTCGTTTAG

AF031926.1up sequenced from RT-PCR results

TCCCCTCTTCTCTTGTACTCTTGTGCTAGTGCTTATAGGG  
AACTTATCTCCACTCATTTTTTTGTGGGTTGATTGTTCGC  
ATTTCCTTTTCACTCCTCTTGGCCATCTGCTTCGTGTGCG  
GTTTTGAGTCCACACATGCACGTTTGGCCTCGCGTACAAC  
GGTGTGTTTGACCCTATTTTTTTTTTTTTTTTTTTGCTTTTGA  
ACTCTATTTTCCCTTTTTTGTGTGATGTGTGATCGGCTATT  
TTGCAAAG

AF031926.2up sequenced from RT-PCR results

AAGTGATATATGAGGGCAGTATGCTGTTAGTGTGTATGTG  
CACTCTAAAGCTGCTGCTGTGTGTCGGGATAGTGATTTACGT  
AAGTGATATATGAGGGCAGCATGCTGTTAGTGTGTATGTG  
CACTCTAAAGCTGCTGCTGTGTGTCGGGATAGTGATTTACGT  
AGGGCAGTTGATTATCTCCTTATATATTTGTCTTTTTTTA  
AAGAAGGTTATGTAAATCATGAAGCGAAAACGGTTTTGTT  
TTTTGTTGGAGATGGTTATTTTTTATTTTTTTTTGTTTTTG  
TTTTTTTTTCTCTATTTTGTAACAGTTTTTTATTTTTATT  
TTTTTTTGGTTTTTTGAAGGTGCTTTATTTTCTGTTTTTAA  
ACTTCTCCTCTTACTTTTTTTTAG

AF078916up sequenced from RT-PCR results

CCTTACCTCAAAGCTTTTTGTTGACGTTTGTAGTGTTATT  
TACCCATGTATTTACGAGGAGGTATGTTCCACATATGTTTG  
TGTGTGCTTTCTGGTGAAGAGAAGCTTATCACAGGGGAA  
GGACGGCTGAAGAGTCTAAATATTTCTTTTTTAAAAGGGC  
AGTGGTGGAGGTTATGATCGCTGTAAACCTACAGCAAAT  
TTATCAAGTTTCTTTCCCTTTCACCCTACACCCTGTAAAA  
CGGAG

AF079110up sequenced from RT-PCR results

GCGTCAAGCAATGAACTTTCTTTTGATTAAATTAACATGC  
AAAACGAAGCGAGGAAAAGTTTGTCTGCTTTCTGTCTATCT  
CTTCTTGTCTAAGGGTGGTTGTCTCCTTCAAGCATTGTC  
TGGCGCACGCTGAAATGGGTGTCGGACGGTGCATGAAGTT  
CTTTCTTATTCATCAATCCCTCCACTTTACTACTTTGTCA  
AACTCTCTCCTTCCCTTTCCTCATCTGTATCTTATTTTGG  
GGGCGGGGTCACTGTGAACCATTTACGCTACCAATAAG



AF095907.1up EST mapping

TGTTTGTTCCTTTCCCCCCCCCCCCAAATCTGTTAAGAT  
CTGGTGCGATTTGGGTTTCAGCGACATTTTATTTGTAGGCC  
CGTGCCACCTTTTCCTTCCCAAGGTTTTTGGTTTCTATGG  
ATAACATGAATACGTGTAATTTTCGTCCACACTTGTTCGTAC  
ATTTTTGTTCCCTTTTCAATTTTGTTTACCCTGTACTGTTA  
ATCCGCATTGGCGCGCTTTGGAGAGTTACATGAGGGAAGA  
GAGGCGCTTGTGTTCTTATTTCTTATTCCAATCTGTTGCA  
GGATTGTGGCGTGGATTTAGGCCTCCCCGTATCGTCCGTC  
GTTGGATCCTGGTTTAGTATCTGCTGTCACTATTTTGCAC  
CCTTTTACCCTTTTTTCTGGTGTCCCATTTGTTAAGTTGG  
CTGTAATCGGCTTTTAAACCTCCAAG

AF095907.2up EST mapping

TGTTTGTTCCTTTCCCCCCCCCCCCAAATCTGTTAAGAT  
CTGGTGCGATTTGGGTTTCAGCGACATTTTATTTGTAGGCC  
CGTGCCACCTTTTCCTTCCCAAGGTTTTTGGTTTCTATGG  
ATAACATGAATACGTGTAATTTTCGTCCACACTTGTTCGTAC  
ATTTTTGTTCCCTTTTCAATTTTGTTTACCCTGTACTGTTA  
ATCCGCATTGGCGCGCTTTGGAGAGTTACATGAGGGAAGA  
GAGGCGCTTGTGTTCTTATTTCTTATTCCAATCTGTTGCA  
GGATTGTGGCGTGGATTTAGGCCTCCCCGTATCGTCCGTC  
GTTGGATCCTGGTTTAGTATCTGCTGTCACTATTTTGCAC  
CCTTTTACCCTTTTTTCTGGTGTCCCATTTGTTAAGTTGG  
CTGTAATCGGCTTTTAAACCTCCAAGGCGCTTTGAAAGAA  
TAGTTTACAACCTTTGTTTCCCTATTGAACCATTTCGTTTAGT  
ACTGTCAAAGGAAGCAAAGGTGTGAAGAA

AF119091up sequenced from RT-PCR results

TTCGTATGGCTTTCATCTCAACCTTTTCTTGTGAAGGAAA  
TCCTCACAAGGAAAGAGACAATAATGAAAGAGAAAAGAAG  
TCCACAGAACACCAAAGGGATATTGTTTGCATTCCATCC  
CTGATCCTCTGTTGTTTCTATCACATACGATGTCCTTGAT  
GCATCTGCTATTATTACTTTTTTTTTTCTTTTGCAG

AF164200.2up EST mapping

AAGCACCATAGACTTTAATTTTTCCGTTGGTAAATCAAGG  
AAGAGGTACATGACACTGGATAGAGAAGAGACTCGGCAAG  
ATCCAAATACAAGCCTTGAAGTAGTGAGAAGGGCGGATCC  
TTGTGGGACGTTAAGGTTGCTCTGGTTTCAACTCCGAATG  
GACGGGGGCCACGCCATTTGTTGTCGTTGTCGCCGTTCT  
GGATATCGGAGCCTTCTCTGTGCTCTCATGAAGGACTTTC  
CTTTTCCTTCAACGCATACGTCCTCTTTTGCGGGTTTCCC  
CCAGGGGCTGGTCGGTTTCAAGAGTGGATATTCATGCGAC  
CGTGACCGCCTGCGCTTCAGTGACATTCTTTTTTGAAAAT  
AAAATTTTCGTTTCCTGT

AF301417.3up EST mapping

ATATTTTGGGTGATTTACTCCATTATTCAAACGTTAGCAC  
GAAAGATCTAGAAAATTAGTATAACAGAGGGGTTGATAAA  
TCACATTTTTTCCCTTTCGCGTTAGTT

AJ005114up sequenced from RT-PCR results

GCGCAAGCTTTCGATCCCTCCCATACATCTGTCTGTTTCT  
TCATAACGGCTTCTTACAATTATATGCTCTCGTTCTCCTT  
TGTCTACATTCACCCCCCCCCCATTGCTAACTCATTGCCGT  
CGTTTGATGATAACCACCGTCCTGTCCACCATCTTTATTG  
TGATGCGTGGGAAAATAG

AL493679.1up EST mapping

TCTTCATGACAAGCCTGCCACCATTCTGAGGCGAGTTAAG  
GGCAACCACTAAGTGTTTTCTTTTGCATTTTTTCGTGTCCC  
TAGGGGAGGGACTCAGTTGATGGTTCGCGCCACGCTGCGC  
ACACAGCTGAACCTCCTCTCCAGGCAGCCGGTTATAGTTG  
TTTGTTTTAAACCAAGTGCCCCCCCCCAATTGACGTGGAGC  
GGCTTTTAATTTTATTTAACCTGCTCAGGGGAGGAGAGAT  
GAGAGAATGTCCACTTTCCCCCATTGAAGGGGCATGTACA  
AATGAACATGGAAGCACGTGAAAACGTTCGATTCCATGGTA  
GGTATTTGACATTGCATAGCACTGACACCCAAGCACGACC  
CCCTTCTCCTGTTTTTTTTTGCAATAAAATCACTCTTAATA  
AATAAAATCAGAAG

ALLTRYP-1C06.Q1Cup EST mapping

CAATTTTCATTTGGTCAGCAGTTGGAGCTGTCTTTATTTT  
TTCTTTTTTACCTAACATTTAATGGCCGCGCTTTTGGGTA  
CGGAGGTGCGCAGCGTGTAACGTTGGATTTTGTATGCAAC  
TTTTTATCGTGCGGGGCCCCCCTTACGCGATATTTGGGT  
CCCTCTACCTGCTTCTTCTTCATTTGGTTTTTGGCGTAGC  
AAGCTGAGTAGCGCAAGGCTAACCGCTCTATTTTCTGCTC  
ACAATCATGGCTGTGCTTACGAAG

AY046888up EST mapping

TGAAAACCTGCATTACGAATGGTTGTTTTGGTCATAGGAG  
TGCAGAGTATTATTTGTACGGTTATCTTTCTCTAAACAC  
ACCTGTACTCCCCGTTTATTTACACAGCTGTCTGCAAGAG  
AGTGAAATTTTTAGAAAGCCACACAACAACCCTCTTC  
GCCCCGCACAGGAGACGAGTTAAAGACGCTTTCAGACACT  
TCCGCTCCGTTAGTAAATTATCGTTTCAATTCATATTTTG  
TGTAGGATAATGAGGAACGCCTACTGTTTATTCAGTATGA  
TAATTATTTTCGTATATCTTTCTTGTTGGTAGTAAAAAAGG  
GAAGGTAAGAATAACTAATTCATTATTTGTTATTATTGC  
TGTTGAGAGCTAATGACTATGAGAGATGGCTTAGGGAGGA  
TGTATGAAATGCGTCACTATATACTTTATTGAAGGTGTGA  
CGGTACAGAGCGATTCAAATAAGAATTGAAGGAAATAAC  
GATTAAGTGATATAAGTTTTCTCAGTTATTTTACTATTGT  
TTGTGAAGTACGCCTATTTGAATTGAATCCTCCGCTTGAA  
GGAAGATATTAACATTATGATACCTTCACTTCATCCTAAA  
CTTACCTTATTGTATCGTCTTACTTTGAATGGAAAGATGT  
TCATGCCTGATGTTTAAACGCTTTTGCGTGTCACCTCTGA  
TTATATATGTATAAATATGTGTATGTATTCATGAACTGGA  
AGAAATAAGTAATAGCGCCGTCCTTTTGCTCTCTCAAAT  
TATAAACATCGAGAGACATTCATAGTGCAGAGGTTATAAT  
TTGAAGTGAACACCAACATTTGAATATTTTGCTCCCGCAC  
TAATTTATTACACACTTCATAGCATCAGAAATTGAATAAT  
ACTCGAAGTATTTATTATTGCTTGCTGGAGGCACATAACC  
GGTAAAGCAGTAAATATTATGCCTTGCAGTATTTTTATGA  
AACTGGAGTTTAAATGAGTGTAGTGCCTAACAAATCCTTTA

AY046888up EST mapping (cont'd)

GTTATATCACACGCAATTGTTTTACCATTTAATTCTTCTT  
TTTTTATTTTTTCTTTGTTCCCTCCAACCTTGGCACTCAAAC  
TTCGTACAAATGGTTTATCCATGAGGAAGTTTATTTAAGC  
TTTCAAACATGCTTTGATGTTGTTATTTCTGTTGTTTTT  
TGTTAAAGGCATCCGCTGCTAATTATCACTTCAGGTGTCA  
GATATTATGGAATTGAGAGTTTAATGTTGTCAGCTGTCGT  
GTTATATATGTATATATATATATACAGAAACAAAATTACT  
TGTGAGAAAAGCTGCGTAATATTTCTTGATTTTTATTCTT  
CTACTTTTTAGAGAATAATATAATTCATATATTTTGTTTG  
TGTTGTGCCTGATTTGTTACAATTACATTTTCATCATTTCT  
ACACACACAGACACACACACAGACACACATACTGAGTAAA  
TATTAGAATGATTATGTTATGAAGATGGCACATACGTATA  
CTCGAGTTGTATTAGTTTTACCACATATGTGTGTTATGTA  
CTCTTTCTAATTCAAGTGTGAGGGTGGCGAATTATAATAT  
GTGGTAAATATTTGTATCATATATATTTGTGTTTTTATAA  
GTTTCAATTTTATTTATGTTTCTATTTTTTGATTAATTTGT  
GCTTACATCACCAGTACTATCCTTTACTGTTTTACTGTTT  
GAACATTTTGTGTTTGCATCTGAAATTCACAAACAAGTTA  
TAATCTGTATTATGAAACTGTGTTCTTTACATTACCTTTT  
GTTTGATTCTTTTTTTTTCTTTTCCAAAG

AY046919.1up EST mapping

TGGCTGTGCAACATATCTGTTTAAACACCTCTACTGCACTC  
ATCGTCCCTCCACAATTATGTTCCGTTGTTTCCCTTAATTT  
GCTTTTAGAAAGGTAAGCTCTGGTAGTCGTTTGCTCTTCA  
CAATATGTGCGGGAAACATATTTTCACTTGTTATGACGAT  
GCTGCTGCTTGCTTTTGCCTTGAGCAAATCAATCACCCGT  
CGCAACACTGTTAAAACATAACTGTGACGCGAGAACAAAA  
CCACACTACCAGTACGCTGGAGGTGTTGTTTTGCATGCCT  
AAATGTATCTGTAAACCAAAGCTGGTGAATGCTCCGTACC  
TAAATGTGAAAAAGTTGGATGTGCAAGGAGGCAGCTAGCT  
AGCTTATCTCCTAGCGAGTCGGATCTTCTTAATATATTTT  
TTCTCTTTCCATAATGACGTTCAATGCGAGCACTCGGGC  
ACAAGAAAAAAAAGAATGTTCCCTACTTTCATCCCTCCCT  
TTATTCAATTTGTTTAAAATAAAA

J04214up sequenced from RT-PCR results

CTGTTCTATATTGTAGCGGCCAAGCCCCGTGGTGTGGAA  
TTTTCTTCATAAACGTGATTAGGTGTA ACTAAAGCACCTT  
CTGACTGTCGTCGTAGTTGTTGTTATTACTTCTTCTTCCT  
TTTTTTCTTTTTCTTTTTGTTTGTTCGTTTGTGTGTGG  
GTGCGTGTGGGTGTGTGAGAG

J04841up sequenced from RT-PCR results

CTTTGCGTCGCGCCGTTAACACACTGTTACGTTATTGATT  
TTGTAATGATAACTTTTCCCTCCGTTTGGTGGTTCGATGGT  
GCCAACGCAACTCTGTGTCTTCACCGCGGTGGTGTGGTG  
GGTGCCTCGTCCAAGCATTCCCTTTGTCCACTGTTTGT  
TATCTTACCCTAATTCTTTTACTGTACTTTGATTTCATCAG  
AGTAAAGAGACCCCCTGTCACGCCGATTAATTACCAGGC  
TAAGCGTGACGGTGAAAGAAGGTAAGAAAGAGTCAATAAA  
GGAGGAAAACAATCTTAACCAATAAGAGGGGGAGGGAAGG  
AATTAGGTTGGTAACCTTTTCACGTTCCCTATAAAGAG

L10721up sequenced from RT-PCR results

TGGTTACGTTCCCTCTCCCTCCACCCTCCTCTCATTTTTTT  
TTTCCCTCCGTCCTCTGTTTAACTGGCAATATTGACGTGA  
TGCGGCCGTCCCCACAGGTATCATGCAGTGCCTGGTAGTC  
CACTACCTTGAACCTAACCAATTATCGTGCATGTTAGC  
ATCTTCTTTTCCCTTCTGCGGTAACAAG

M20570up sequenced from RT-PCR results

AGTTTTGAGCATGTCATAGAAACCCAATGATACGGTATCG  
CGGTGGTGGTGTGTGGTGTCCCCTTTATCAACTTTCCTCT  
GTTCCATATGTTTCAAACCTGCTCGTTTCCGTTTCCCTTAT  
TTTTTACTGCTGTTTCATAG

M33129.1up EST mapping

AGTGCGGTGCCTTCGATGGTGTGCTTTCCTCTCCTGG  
AATGTGCTGGCTCGGGTTAAGATTTTAGCGGGTCGGGGGA  
ATGCGGCCCAACTTTTTTGGCGGAAATCTCTTGCATTGAC  
TTGCCGCGTAACCCATGGTGGTTTCGTCAGCCTGGTAGGA  
GCTGAGACAGCAGCATAATGGGTGGATTCTCGTATCCATT  
CGTGTGGGCATGCTCCCCACTTGCATGGGTTCATTTTTG  
AAACATTGGTGCACCTGGGGGTGTGTTCCGTAGGAAGGGCC  
GCGCGGTTGGGGCTTTAAAAGCACGACTGTAACATCTATA  
TAGTGAAGTGGCGGGTGTACGAGTTGGGAGTGCAACATTT  
GAGTGCGGTGTTTGTCTGTCATGCCCCGACTGCTAGTTT  
TCAGACTTCTTCGATGCCCGGTGTTTCGTAGCAAAACATA  
CCGCTGCCGGCCTAAATGCCGCTGATTCACCACAAAGTGC  
TTTTTCAGTGCCCCCAAACCTGGATTGCCAAACTTCTGACAA  
GTGTATTGTTCCGAGTATGGTGAGCGAATCCCTTCTCTAT  
TATCAATTCTCGAAAACCTCTTCGGGAGTCAGGGCCCACGG  
AACCGAGGGGGCGGATGAGGGGAGAGGGGGAAACAACAATT  
CCGCACCGCGAACAGGCACCGCTCCCCTGGACCTCTCCCT  
CAGATGTGAGGTGCAGTCAGCCTTTGTTGTCATTGGGGTT  
AAGCGGAAAGGTGTGTGTCAGTAGGTTGTGAGGTGAAAGC  
GTTTTTCAGATGCATAGTGAGCTTAATGTCCTTTTCACAGT  
ATATCGTGTCTGATAGGTATCTCTTATTAGTATAGTCGAA  
TACTAGTCAATAGTGCGTTTTTGTGCAAAATGTCCATTTTG  
TGGCAGTGATGGGGTTGTTTTATGCTATTCCGTGTCTCTG  
GGTGGGCGTGCATTGAAAATAGGGGTATCGGGTGAGTAC  
TGAGTTTAAACATGTTCTCGTGATCGCTGCACGCGCCTTCG  
AGTTTTTTTTTCCTTTTTCCCCATTTTTTTTCAACTTGAA

M33129.2up EST mapping

GCGGATGCAAGCGTGTAAAGCGCCTCGGAGGAACGAAACC  
CCTTTGAAAAGGTGGCTTTCGTTTATATATTCTCCATCTG  
GTGCATCGTGTTTATTTTCGTATTATTCCCTGTCAAAAGCT  
GCGGATATTCATTTAATATTCTTTTCGTTATATATTTTFA  
GTTCTATCCTTTATTTTATCCGTTTTAATCGTCTTCTGAG  
ACCCACAGCCCTGTAGATTTCTGTGATGTTTCGGTTGCGT  
ATTCCATAATTTTAAGCGTTTCACTTCTATTTTTTTTTCAT  
TCCTTTGAATTTGGATCTTAAAATTATCATTGGTGCCTTG  
TGTTATTGTGCGTGCTGCGTGTGAATGTGGCGCTCTGCCT  
TTTAATTTGTTGGATGAGCTATTTTATTAATTTTTTTTGCC  
TTCTCTTCTTTTGGGTTCGAATAATAGTTCCTTCTAAACC  
TTCAGGCCAGAAATGGGAAACAAGTGTTAGAACGGCCAAC  
TTGGGCGAAGGGGTCTGCATGTTGCTTTATTTTATTGGTG  
GTTTTATGTGCAGTGTTTCCCTGCTTCAGATGGGCCCCGC  
AGCTGAAGTTGTTTCGCTGCCCTGCCCCCACTGCTGCGT  
TTCTGCTGGAGAAACGATGTTGGAGGTTGACGGGTGTGTG  
CTTTTGAAGACTTTGTATGAATATGGAAGGAAGCTCGCAG  
CGGTTACTACAGGCAGTTAAGGGCTGAAGTGCTGTGCCTT  
TTCTATTGCCTCTCCCCCTCTTGAGCTATTCTTGTCGGGA  
GAGTGATTTATTTATCCGAGTTTCGGTTAATTGTCCCTTA  
GGGATGAAAGGCACCTCAGAGATGAGAGGGCAATGCAACG  
CTGGTTATCCAGTTGATGTGCGCATTTCATATATAACCATT  
TCCCCATTTTTTTCAACTTGAAG

M33130.1up EST mapping

CCTTGGCAGCCCAATAAACCACGCAGATGTGGTCCCATGT  
TCAGGCTCCGCTGAGCGTGGGTCTTCGTTTCCCAAAGCG  
CGAACATCCTTAACCAAGCCCAACGCATCCTGGTAGGTCA  
TTGTGCCGACGGAATTTCAACCAATCAGGCGCGCCACGGT  
TCCCACCACGGCAAAGCTCATTGGGAGTCGCGTGCCAC  
CGAAGGTGCCCCCTTCATATGCCGGTGTGTGTGGGGGCAG  
GTGTCGGCTCGTTTTATTGGTGAGTCGGCCCACCAACGCC  
GCCGATTTGCCGAGTTGCCGGGGCCGTTATCCGCCGAAATT  
GGTTTTAATTTCTGCTAGTTCTCGTTGAGAGCGCATGAAA  
GGAAAACTTTACCAGCGTTCTCCATCAGCCGTCGTGCTGA  
AGGGCTTTCAGACTTCTTCGATGCCCGGTGTTTCGTAGCA  
AAACATACCGCTGCCGGCCTAAATGCCGCTGATTCACCAC  
AAAGTGCTTTTTCAGTGCCCCCAAACCTGGATTGCCAACTT  
CTGACAAGTGTATTGTTCCGAGTATGGTGAGCGAATCCCT  
TCTCTATTATCAATTCTCGAAAACCTCTTCGGGAGTCGGGG  
CCCACGGAACCGAGGGGGCGGATGAGGAAGAGGGGGAAAC  
AACAATTCGCACCGCGAACAGGCACCGCTCCCCTGGACCT  
CTCCCTCAGATGTGAGGTGCAGTCAACCTTTGTTGTCATT  
GGGGTTAGGTGGGAAGGTGTGTGCCAGTAGGTTGTGAGGT  
GAAAGCGTTTTTCAGATGCATAGTGAGCTTAATGTCCTTTT  
CACAGTATATCATGTCTGATAGGTATCTCTTATCAGTATA  
GTTGAGTACTAGTCAATAGTGCAATTTTGTGCAAATGTCC  
ATATTGTGGAAGTGATATGGTTGTTTTGTGCTGTTCCGTG  
TCTCTGGGTGGGCGTGCAATTGAAAATAGGGGTTATTAGGT  
GAGTACTGAGTTTAAGATGTTCTCGTGATCGCTGCACGCG  
CCTTCGAGTTTTTTTTTCCCTTTTACCCATTTTTTTTCAACT  
TGAA

M36124up sequenced from RT-PCR results

CCTGTAGGGGACCGAATGTGACATCCATATCCCGCAAAA  
TAAGTTCTTTGTTGTATTGCATGGATGCGCATGCCTCTAA  
ATTTGTTACTCGTCCGATTAAGAGAGGGAGAGGGGTGGT  
ATACCATTGGCGTCGGGCGTTTTTGACATTGCTTCTTCTTT  
TTTTTTTTTAAAGATTCTTTCCCTTTCCCTTTTTTTTTATT  
AACGGTTCAG



TRYP10.0.000001up EST mapping

GCGCAAACAGAAAACAAGGGGAGAATGACTTAAAACGCTA  
ATTCGCGCCTTTGTTTTCTGAGGAGGGCTAGGGAGGGACGCG  
AAAAAGGTGATGTACGGGCACGAATAGCTACCTAAAGTGG  
GGCACGTAAAACAATCTCATATTTTTTTTGTTTTAAAGGGA  
GGTACCGCCACGATGATATCAAGCGCAAGCTGAACATGGA  
ATCCATATATGTGACGGCCGATGGCGGTAGCGGATAGCGA  
TCTCTTTCCTTTGTCTTTTTCCTAATTTTCGTGAGTCCTTTC  
GAGTTTGAGCGCATATGACAAGTACAGCACGGTTGTAAGC  
GTACGTATTTGAGTCGTCAGTTAACCTCCAATTTCTTGTC  
CACCTGTTTCCACCATACCCCCTTGTGTGTTATACGTGAG

TRYP10.0.000011up EST mapping

CTACTGTCGTTTCTAACAGTGATTATTAATTGTTTTTTAC  
ACGGAGAGGTATGAGTAAATATATATATATGTGTGTGTGT  
GTGTGTGTGTGTGTATATTTACAATTATCATCACCGCTAT  
TGTTATTATTATTATTATTGTTATTATTATTATTATTATT  
GTTATTATTATTATTATTAATCTTCATATCATTGCAGATG  
TCCTGTGTACACATATGAATGTGAGGAGACGAGGCATGGAG  
GATGGAAAACGTGGTACGGCATTCTGAAGACCGACTCCAC  
CTCACGTTCCCTTCCCTTCCCTGCCCCGCTGTTTCATTTCT  
TTTACTGAAACTGATTCATCAAATGCCCTATTCTTCGCGT  
TTCTGTCACTAACTGCGGTGAAATTTTCGTTGAATAACCAG

TRYP10.0.000012up EST mapping

TCCGTCACAAGTAGTTCTGACCACTGGAATCAAATGCTGT  
GGCAGCAACACGTGGTTGGAAGTGTGGAGCCCCTGGAGGG  
AGTTCGTTGTCATTTGTACACGCACGGTGTTCGCATATTCT  
TTTGATGTTTTGTTATTTCAAGCACTATTTCTCCAACCGT  
TACTAGTGAAGAATGAGCAGAGGGGGAAACGCATTTTTTT  
TTTTCCCGGCCAGCCCCACAGACGGTCTGGGAGCTGCCGC  
ATTTACTTGTGGTGAGCCCGGCGACGATCAGTCCTGTTGT  
TCTAAGCTCCATGCCTTCGTTTTAGGTTGCCCTTACCACT  
CGTCTTTCGTTTTCTTCCCTTTTTTTTAACTTTTTTTTTTT  
GCTTCCATTACATCTTCGTATGTGCGTGTGTGGGACTAGC

TRYP10.0.000015up EST mapping

TATGAGTTCGCTACTGCTGCGATGGAAACTAAGTGAGGTT  
CGGGGGCAAGGTGTGACCATTTCCGGATGATGCAAACCTCG  
ACAAGGTGTAAGTGAAGTTCAGGGCATGGAAACTTGCTCA  
GCACCAAGGCGATATGCGCTGCAGGTTGCCAACGCACCCCT  
ATGTGTATGTGTGGAACTTGCGGGTATTGGTGAACCAGT  
TACTAATACACATCTGATGGTGGCACCTCGCAAAGTATA  
TCCAGGTTGATGGGTATAGTGAACCTGCGTAGTGCGCTAT  
AGGAAAGAACATGAGGGATCCCTGGGTGGCCCCTCTCCAA  
CACATTTGATGCCCTCTGGAGAATATTTCCCCTAATGTC  
TCAGCGTCTTAATTCTCTCATTCTAATTCTATTGGTTTCA

TRYP10.0.000026up EST mapping

ACATAATGAGGAGTGGTAATAAGCAATCGTAATGCATCAT  
GATAAAATATTTGTGGGTAGATGACTGCGGAAAAACGTAA  
CACAGCTGGGTGGTGCTTTTGAAGGAATGCTGTTGGCTG  
CTGTAACGTGAAAATAATGGTGCACCGAGTACAAACCCGC  
AAGGTGCAAAGGGGGGAGTGCAATAAATGAGAAGCTGTAA  
CTCCTAGGCACAGCTCGACGGTCTCTTAAGTTTGGCATTG  
CCTCCTCCTTGAATTGGATACGTACACACAAGCCCTTGTG  
CCGCCGCTTGACGGTGGTGTGGACACGTATACCCATATGC  
ATGTCACTGCGCCACTCTTCTTTCTTCTTTGTTTTTTGTT  
ATCGTCTATTGTGCGTACTGCCGTATACGTTGTTTACTAG

TRYP10.0.000030.1up EST mapping

GGTTGTGGCCAATGTGTTTCATGGCTCGACTTGTTTCTTGT  
TTTTCTTGCTGACTGATCGAACTGCACTTCGCTGCATTTG  
GGAGGCGGATGGTGGTTAGTTATGATTCATTCCGGCGGTG  
GGATTTTGTATATTCTAAGCATGCCATTTCTTCTTAATTT  
GACCTTCTACCTGGTTTATCGCTGTGACAAGTCTTTGCAT  
GGCGTCACCGTCTGCTTTCACTGCGTATGTTTGTGAAGGC  
AGGTGCTCCCCATACTTTGCTCCAAGTAGTGGAACAACCC  
TTTTCACTTATGCGGTTACGTGTATCTTTCTACGTCTGCA  
TGCGTTACCCGCTTCCTTCGATTGTGATTTTCGACCTCTTT  
ATTCCATTAGCGCAAGGTAAACATGGCTGCCACGAAGAAG

TRYP10.0.000030.2up EST mapping

GGTTGTGGCCAATGTGTTTCATGGCTCGACTTGTTTCTTGT  
TTTTCTTGCTGACTGATCGAACTGCACTTCGCTGCATTTG  
GGAGGCGGATGGTGGTTAGTTATGATTCATTCCGGCGGTG  
GGATTTTGTATATTCTAAGCATGCCATTTCTTCTTAATTT  
GACCTTCTACCTGGTTTATCGCTGTGACAAGTCTTTGCAT  
GGCGTCACCGTCTGCTTTCCTGCGTATGTTTGTGAAGGC  
AGGTGCTCCCCATACTTTGCTCCAAGTAGTGGAACAACCC  
TTTTCACTTATGCGGTTACGTGTATCTTTCTACGTCTGCA  
TGCGTTACCCGCTTCCTTCGATTGTGATTTTCGACCTCTTT  
ATTCCATTAG

TRYP10.0.000033up EST mapping

TTACTGGGCCGCCGAAGCTAAAGTGTCGGTTGGACCATGG  
ACCAGATACTGTCCACCCGATGATTATGCACACAAGTCTG  
TGCTTACCAAGATGTAACAGTAGAAAACAAAAACAATATT  
GTTAATGTGTGACGGTTTAGAACTATGAAAACGAAATACA  
ATATGGATAGAGAAATGGAAGTGAATGCGAACAAGGAAAA  
CTATCGATGTTCAATCGAGTTCTCCCACCGGTTTGTTTTA  
GACCCCTCTTTCTGTTTTGGTAATGTGCCCTACTA ACTAT  
TATGATTGTCGCTAACTAATCGTTGGTGTTCCTTATGTAT  
CTGTGATTTTATCCCCCTTTGAATATCGACTCTGATATTT  
CAATGTTTGCCGAAACCTCCCCCAGTTCAGGATAGCAGTG

TRYP10.0.000036up EST mapping

ATACCTTCGCTGGTATCAGTTAATTGCGACGAGTTCCATT  
TCGAACACTAGCGATGCGCCGGGCTCGATACCCCACTCAG  
GAAAACCTTTCGTCCCGTAGGCGTATTCGCTTGTCATGGC  
AATCTTCGCCTTCTCTCCCAAAGGCATTTGAAGCACAGCC  
TCGTCCCAACCCCGAATTACATGTCCAAGACCCACGCGGA  
ATGAAAAGGATTCGGTCCCGCCTTTTGCCGGCCAAAATAT  
GCGCCCATCAGGGAAGAAACCGGCGGCACGCACCGTGACG  
GAATCACCTGCTTTCGGACAAGGGCCAGTTCCTTTAGTGA  
TGATGTCGTA CTGAAGCGGCATCAGTTTACGTGGTTCTTC  
CACAGGTATCGGTAAGGTTAAAGAAAATTAGAGGGTAATC

TRYP10.0.000037up EST mapping

TCCGATCCTCATTTTTGTCCACTGGAAACACGAGGTGT  
AAAATCATCGGCCCAACGACGTCCAATCGTCCAAAGGA  
TCCATACAAAAACAGTGGCAAGTCAGCTAAGAAAAAGAAA  
AAAGAACTATTGAATCTAACGGTCTTTTTTTTTTTTTTA  
AAGACTTTGCCTACAAGGTTTAAAATATATGCTCACTACC  
ACTACACTAAAAGAACAACAAAAAACAAGAACACACAAA  
AAGGCGTAACAGTATAATTTGTTATAACAAAAGGGAAAC  
CGCGTGTACATGGTCGTATGATCTTCAATACAAATAACG  
GTATAGGATCAATCTTACACAATACGGACACTTCGGCATA  
GTAATGACTCGCCTTATTATAATGGGATGCTCGCTACAGT

TRYP10.0.000041up EST mapping

TTTTTTCCCCCATTCTCTTCCTTTTTTCGTTTACTTATTCA  
GGAGATTTTTTCTTTAAATTTTATTTTTTCTACATTAGGA  
GGGTAAAGAAGGAATAAAAACGGAATTTACAGCGTTTTTC  
TTTTTCTTTTTTCTCTCTCCATCTTTCTCTCGTCTTTTT  
GTTTTTTTTGTTTTTTTTGTTTTTGTAGGGAGGGGAGG  
GGGAGGGAAGTGTGTTAACATTGGCACCGCACTCCCCATC  
CAACAGACCAGGAGAAAAGGGAAACTGGAAAGTTAAACTA  
TAAAAGGTTTTGTGTGCATACTTTTCTTATCTGTTTCTCT  
TTCTGAAGCATATTCATGGATTTCAATTTTTTCCCCCCTT  
TTTTTATTTTTTGCAAACCTGGTTTTGGTTTAAATATCAAA  
G

TRYP10.0.000313up EST mapping

TTTTGTTCTCAGATCCCTTATCCCAATATTTTCGCTGTTT  
GCACCCGCCGGTTTACATCGATGGGTCCGAGCACTGTGTT  
TGTCGGTGCTCACCGCATGTGAAATACTTTCTCCTGCAGA  
GCGGATGCAACGCGTACTCACACGCACAGGGTTATACATA  
TATACACATATGCATATTTCCGTAGTGATAATAGCAAACA  
TAAATTCTTTGACATACCCCTTTGCTTGTCCCTGGAGACC  
TCGATGTTCCCTCAATGCACAACAATCGTACGGCTTTCCT  
TCTCTTACCCTTTCTTTTAAAATAACACCTAACCACCTCG  
TATCACTATAAAAATATATATATATATGTATATAATAAAT  
CATAGGTTTCAACTCTTTTTCTCTTACCTTCCCGGTAATA

TRYP10.0.000508up EST mapping

TAACCTCCGACACGAGAGAGAAAGAAGAAGCACAGAATAA  
TACGCCGATGCGCGCGCACAGGCATCAAATAGGTGAAGTG  
ATTGCCTTTTCGCGCCCGATTTCAGGAAAACGCGACCAACG  
TATTATTCATGAAGGAAAATGTGGTGTCGCCCCCCCTTTT  
TTTCCTCTCCACAGTGTCTTTTGGTTCAGTTTCTGTGACC  
TCCCGGTGGGGGCAGGGAAAGCGTCATTCTTTTTGTTTTGT  
TGTGCCTTCCGAATATCTGGGTGGGAGAGTTTTAGTTTTTC  
CTCCGTCTGTGCGACCCTTAACTGCTCTCCTCACCAAGTG  
GAGCCCATTTGTTTCAGCGCTCTCTCATATATTTTCCTTATT  
CATCCTTCTGTTCTGTTTCTACTGTTGCCTGTACTGTAG

TRYP10.0.001820up EST mapping

CGTTTGTGTACATCCGCGCGCCACTCTATTCAGAGAGCCA  
CGGATAGTAGAGGAGGTGGGAAGGGTATATGAGGGACACG  
CGTACCATGATGTGGGATGTATTGGGGTCCCTGTCTGTCC  
TTACGTGACTATGTATGAACCGTCACGTGTAAGATGAGCT  
AGTGAGATCAACAGTACAACCTCATCAACACGCCTTCTTCT  
CGTTAAATGTACACAATCTTGATCCTCCACCTTTATGGGT  
CCCATTGTTTGCCTCTTCCGCTGTGTGGAGTGCGCCTACA  
CGCACTTCTCACTTCGTAAGTGGTGGTGGCGTAAGTATTG  
CCTAATGTTGACTCTATGTTCTCCTCTCCTCACCCCTCG  
CGGTGCTGATTTCTGACAGATCTTCAAACACTAGTTTAAAG

TRYP10.0.003695up EST mapping

TGTTCAACTCTCCCAGGAAATGAGAGGAATACAATGGCAT  
GTTCACTACAACGCATACGCTGTAACCTTCTTAACAGAATT  
GTTGGGAGAGTTAAATTCCC GCGTAACGGCCCGATATTAG  
GGTGAAACAACCCATAGAGCAGCATCGGCACCGGGCATCG  
CCAAACAGTTGCTCTCGAGACAATTTTGACTTGGTGGGCT  
CGTATAATGTCCGTGGGATCCGTTTCAGTTATTTGGAGTTT  
GCACCTCTGAACTTACCGCCCTCGTGTGCTAGTTTTTAT  
GCGTCTTCCCCCTTTATTTGTCCAGGGAAGTAAGGGTGAT  
GAACGCTAAGATAGGGTGGTGGTTAATTTTTTTTTGTTTTT  
ATGACCCGTAGCGATGCCGCAGAGGATCATCAATGTACGT

TRYP10.0.003781up EST mapping

CGGCCAAGTAGTTAAAAAATCATGTCACGGCTGATTTTTT  
TTTTGTGGGTAGGTGTGCATTATTA ACTTCTGCTTGAGTT  
GGCTGGTCGCTTCGACCCCCCTTACTATCTTTATCGCATA  
TATTGCTCATGCAGTTTGTAACTTCACTTACCCAAGCGA  
TATGGAGTGCTTTCCTCTTAGTGCTTTACCTCCGTTTGGT  
CTGTGCACTGAGAACGTTGAATTA CTCTTGGCGCTGTCA  
GGACTGTGGGTTC CAAGGGAAGCACTGGGTGAAGACGACG  
ATCGCAACACACGGCCCAACGGAGTGACGTCAGTAGGGAG  
AATTTGTTCTTATTTCTATTCTATTTCCCTCCTTATTTTT  
TTTTTCGCCCTCCTCTCCCCTCCTCCTTGTTATTACCGTA

TRYP10.0.003801up EST mapping

TCCTTGTGGTGGTGATGGATTTCACTGTTTGCCGGAATGT  
GCCGCTGCCTTCGTTCTTTTCGTGTGTGTGTGTGCGTG  
TGGTCCACGCGCTGACACGAAGGCATTTCGATTTCGCTTTT  
GGCACCGCTAGCGCATTTACAGTGTGTATGTATCGGTGT  
GGCCGCAGGCGCTATGTACTGCTATGCAAGGCAGCGTGTC  
ATGGCAAAGAAGTCGCTGTCAGCTGTTACCCGCGCTTGCT  
GCTGTTGCTGTGCGGTCACACAATCTTCCTCTCCCCTTTG  
ACTTGCGTGCGCTGCCCTCGTGTTACCTGTGCGTTGAAGT  
GCAACTACTTCTTTTTTTCATTTCTTCTTCCACATTGTA  
TTGCGGTGCTGTTACCTCCGATTTGTTGGTGTGTGCATAG

TRYP9.0.000625up EST mapping

AGTCACATTTTAATTGTATTAGGCTAAGCAGTGGCGACTA  
AATGTGTCTCCTTCCTTATCTCCTGCATATTCGAAACACT  
TAAAAAATTTTCGGAGGACTTTGATACAGCGAAAGGAAAA  
CCACCAATAATATTGTTATGACCACATATATGTGGTGGTG  
GGGGATGTCATTATTTTTTTATTATTATTACGACCGCGGCA  
GTGTAATGACTCAGGTGGTTAAATAAGTTTTTTTTTTAAA  
TTCATGGGGGTGGATTTCAAGAACTTTGTGTGTGCCTCCA  
TCTACGAGTACGACACACCTAAGTATTCTGTGCTACTGAC  
GACAGGCGTATTTCCCGATTTTTTTTATTTTTTATTTTATTT  
TTGAAAAATCACATCTTGTTTTTTGTAACTTTTTTGTTTAA

TRYP9.0.000728up EST mapping

AGACGCCGTATGGTTTAGCACACACTGCAATGGGGGGCTC  
CCGGCCACAGCAACAGTTGTTACAGAGGAACGCCGACGGT  
GCAGCTTTCTCTCCTTTTCAGGGGGATCTCTCAACCTCAG  
GGTTGGCTAATGCAGTCCGGGCTTGGAAAGAGAGACAACA  
GCGACTAAAGGAGGAGTTGCGCAACCTGCAGTGAGGGAAT  
GACGGCTAGTTCATCATTATCCAGTTTTCCCAATCCATG  
ACTTTCCCTTTTCGAAAGTACAGGCACCCCATTCAGAGAA  
AGAAACACTAATGCTTGGTGC GTGTGAGTGGAACTTTCC  
TGTTTTAACATTTGCATGTATTGCGCCGTGAAACATCCCT  
TTGCCCTTTGTTTTTTCATTATTTTCAATCACTTAGTCAGT

TRYP9.0.000821up EST mapping

ATTTACTTTGTGTGTTGTCATCATATTAATGTGTGAGCAG  
ACGAAAAGATAACTAAGAAGAAACGACAATAATGTGTGTT  
GTTGCTTCTCTGTCGAAACTCCCCTACGCCACGTTCTTCT  
CGTTTGTATGGCGTTGCAGTATAATGTAACATCGTTTGT  
CTTTTTTTTTTTTTGTTTTCCTTTTCCTTTTCGTTTCGGTC  
CGAATTTAG

TRYP9.0.000826up EST mapping

TTTTTCAGACGAGCGCCATCCCAATAGTACTCTTTTTTGGGA  
TATTCTCCTTACTCTTTTCCTTTTAATCTTTTTTTTATTTTT  
ATTTTTTTTCCTCTGGCCTGTTATTGTAGCTGGTGCTCCGT  
CCTTCTGTCGTCTACCATCCTTATTTTTTTGTCCCCTAATT  
CTTCCTTGGTCCTGCAAATTTAACGGATTTCCCCACCACC  
TAGTTGAAGAGTACCCAAAGCACGTCTCGCAATGATCCAG  
GGAATAAAAGATGACAGGTGAAAGAGAAGCCGTGAGAATC  
TCTATCTGAAGTCCAGAGGGATAAACATGTGTGCAGATGC  
GCGTTATTCTCAAGAGAGTATGGAAC TACTCATCCACTCG  
TCATACATTCTTGTGCTCCGGCGCAAACCAAAAAAAAAAAAA

TRYP9.0.000828up EST mapping

AGTTCGAAAAAATGATCCAGGAGCACACGGACAAGTTCAA  
CAAGAAGATGCGCGAGCACTCAGAGCACTTCAAGGCCAAG  
TTTGCGGAACTCCTCGAGCAGCAGAAGAATGCCAGTTCC  
CCGGAAAGTGATTTGAAAACACTCTCCTTTTGTTCCTTT  
TCTCTCTTATTAGAGGTCCTTCCGGGCACTATGTTACTAA  
ATTCCACCTCTTTGGTGTCTTTGCAAGGGGGCTACCTCTG  
TCAAACATTTGATATCTCTAAAATAACGTCCCGGATCATG  
TGTTGCCGTGGCGCAGTTTTTACTTACCTCTTCCACCCT  
TGTA CTGCCACTTGCTTGACCTATATCGTTTTTTCTTTTC  
TTTCCTTTCCGTTTCGCTACTTTTCATTTTCGTTTAGATTG

TRYP9.0.000836up EST mapping

GGTGATGGGGAGACGCATGTGTGACTGAAACATGATTGAA  
GTTGTAGCCGTGAAACCGGATTCAAATGTAGAAGCAAGA  
TTCAACTTGTGGTGAAATGAATTGACTGGTGCGTCTCAGA  
ATACCAGGGGTCGTGGTTTTGTTTGCGTTTTGGAGTCTACA  
GATTCATTCTTATCAATTCGGAGGGGGGTGTGTTCTTG  
ATAATATGGAAGGTATTTGAGTGTGCGTCCGAAGGAACATG  
TGCTTTACCTCATATTCTTATCTTGAGTTACTGTTGCTTC  
TGCAAACGGTTGGATGTTATTTGTTGCCACCCCTTTCCTA  
AGTGGTGCCATCACTATGCCGATTTCAAGCTTTCACTTAC  
ACCTTCAAAAAAATATTCCTCTCTCCTCCCCGACTCTACA

TRYP9.0.000848up EST mapping

TGTTATCACTTTGTTTCATTGGTGTGGGTTGATGCGGTCG  
GTTTTCACTTTGTGTGCCTATCCGTTTCTCCACCCTGGA  
ATGATGTGCTAAAGCTGACCTCTGCTCTTTATTCCATGAC  
GCATTGTCGAGCCTCTCTGCTAAATCAATTTGAACCCACA  
GATTCGCCACTGGAGTGTGTTTTTTATCATATTCAGTGTG  
GATTATGGTTCCGCGAGTGTGGGGTGGAAAGGGACTGTGC  
TTGGTCATGTAGTGTCTGTGGCCTGCGCAATGTTAGTA  
CACCTGCACTCTTGGATTGAAAGCCACGTTCTGCGCAAAA  
CCATTTGTGCTGTTTGATATTTTCATCTTCTTTCCGCTTC  
TCCGACATTTTCATCGTCTAACTTTCTCGTTTTTGCCGTGAA



TRYP9.0.000919up EST mapping

CGCACCTGGACACGAAGGAGCATCGGGGAAATTGAAAAA  
GAAAACGGAAAATACGTATTGCTTCCTTCAGTTATCTTTT  
TTCTTGTCCCCCGCATGTGTGTGGGTTTGACGAAGAGGGA  
AGTAGCCCTGCATTATGCAAGGGTAACATGCGCAGTTGGA  
ATTGGTTTCTAAGTTCATATTTGGTAGTGTGGGCCCTGCT  
GCTTTCGTCCGCGACTCTACGTTCCACGTGACAACCTCTC  
CGCTATCGTGTGCATCCGCTCTGACGGTTAGTCTTGTGAG  
CCCATCCGCTGGAGGTGAGGGACTGTCGTTGTCGCCTTTC  
CTCCGCATAAAACATTTGTTATTCTCTCGATCCTTACCT  
TTACCGCTTTGTTTGTTCCTTCCCTTCTGAAGC

TRYP9.0.001023up EST mapping

GCTCTGCACAGCTGCCATAAATAGGTAGCTGGGGCTCTTC  
CCTGTCCCATGGTATTAGGGGACGCATTCTGTTGAGGGTG  
GTACGTGTTACCGCTCGCACTCGAAGTTCCTTCACACCCT  
TTTTTTTTGGAGTGCATTCATGTTTCGGACTGTGTGGTG  
GAGCCTCGACAGCTTCACAAGCGTTTAAACAGTATATAGTA  
CAGGGATATGTGTACGCATATGCCCGCACGACTGCTAGA  
CTTGTACCCACCTGTGCCTCGTTTTCTCCGCTTGCTCAT  
TTCTTCGCGCACCTGCCTCCCCTTTCCTTTCTTTATT  
TGAAAATAACCAATTACGCTTTTCAAACCGCCA ACTGAAA  
AAGGGCCCTTGCTGATCGCTAGCGGAGATGACCAAAGGTA

TRYP9.0.001024up EST mapping

TGGCGGACCACGGCGTGTTCCGCCACGATACGGTGAAGGC  
GCTTAACCCCGCATTTGAGGATGAGCGGCGCTCCATTGAA  
TGGAAGGCCAACGACAGAAGGTGGCGGTTTACCGGACTTG  
ATATGCCCTCCATGAGGGAGCTGCGGGAATTCACCGCAAT  
CAATATCGACAGGAGAGATTCATATTGAGTTTGGTAGATT  
TTTTCTACATATTTAACGGCGGCTACCGTATTGTTCCCTGC  
TCTGCGTTCCCTGTCCACGAGTTGCTTTCCATTGTA ACTT  
CCACTCGCTTTTCCCGCAGATGTGCCGCAGCTCACGGAG  
GGGCGCTTGCGTTTCACTTTGTATTGTTACTGTACCCTCC  
TCATTTCACCCCCTTCTCCTCTTTCATTGCTTTCACTAG

TRYP9.0.002687up EST mapping

CATCACCGAAGTGCGTGAGTTGCTTCTTGGTTTGATGGGA  
TGATGGCACTAGTGTAACGTGCCCGTCCCTGCTTAACCACA  
AGGCGAATTCCCTTTATTTCTCTTTGTTGCTTGATTATTA  
CTCCATGTTTGCGCCCTTGGTTGAAAGGGCTGGTGACTGT  
TTGTA CTGGCGTGTTGGAAGAGTGCGTCCAAGGTTCTTCT  
TGACGCTTTTAAAGATCATTTCTGTAGCTATCAGGGCAGC  
TATCTGATGGGGTTCAACAACGAAAGTATATCCCCACTA  
CCGGCGGGAGTTAATTTTCTCTATTGGGGGGGTGGTGGT  
TATTTCTTTTCTGTAAATTTAACATTTCCCCTATTAACT  
TCTTTGCTGCCATCTTCTTTTACTGTTGTTGCTGAGGAAG

TRYP9.0.003000up EST mapping

GTGACGTAGTGGCCACATGATGATCCATGTATTCACCATA  
TCGACACTGAGTCGGAAACTCCCCGTGACGCACAAGTGAT  
TGTGCATGGAACCGCCCGCACACGCTGTAGGGCACTGACT  
ACTTTGGTACGGGTGCCACATCTTCCTTACTTTACTTACC  
TCTATCCCCCTCTTCATTTCCCTGTTGCAACCGTACATA  
CCCTAAACACACGTACTACTATGATTACATCCATAATG  
CGTCAGGACACACGAGTGTGTACGTGACTGTTGGATTCTA  
ACGCGACGCCGTAAGCAATATGATCACTCTCCCATCTTTC  
AATCACTTCATCTCTCACAAGATGTTTATTTTCACTTTTC  
CCCATCATCTCGCTACATTTGGATTTGAGGTGCGTGTTAG

TRYP9.0.003024up EST mapping

AACAAGTCATCTCTTACTACCGCATTACGTGCCGAATTA  
GGAGCAGTAAACACTGGGCCCTTCGTTTTATCTTTAACT  
TTTACTGTACGTGTTTTAGAACACGAACTGGAAC TCAAAA  
AGGTACAGACGCAAGGTGCATGGGTGGCATAAATATTTGC  
GAGTTGGGAGGTAAGGAGAGGGGAAGGAGCCTTCAAAAAG  
TCGGCGTGTACCAGAGACGGTGTGGCCTCGTATGTTTTTA  
TTTTTCGTACACCCTTCTGTACTCACACTCTTTTACTTCC  
CAATTGCGCGTGTGTGCGAATACCCCTACA ACTACTCATT  
GCACCCTCCTATTTGTTTACGCTCATA CACCCAATGCGAA  
GAAACAGGTAGGCATACTACAATAAAAATGGGTCCGCTCT

U10562up sequenced from RT-PCR results

GATTACGTCTTTCAGGGTAGAGCCAACGTA CTCCAAAGTG  
AAGAACAACGACCTTGA ACTTCATTACCAATGGACAGAGC  
ACCGAACATATAACCCACACATTGCTCTCTGTATATGCTC  
CCTAGTCGCAGTTATAGCTGCATCATCTACTTTATCACTA  
ATATTTACAAAAAAGACACACCTTACAAAAGCATTTAGTA  
AGAAAGAAGTAAGAGTAAAAAATCATAAGCAATAGCAACG  
AAAAAAAATAACAATATTA AAAAAAAGATGAAAATATCAT  
ATCAAAAATAATAATAATATTTTACGAAAAAGAAACAAAA  
AAG

U20092.2up EST mapping

GTCGACTCGCACTTGTGATGTAGGCACCACTAATACCGTC  
CCTTTCCCTTCTCTTTCTTTTCTCTTCTCCCTATTCTATC  
TTATTCATATTTTATTTCCCTCGTTTCGGATTTTGTGACCT  
TTTTCTGTGGAGTTTGTACGCGTATCCTCGAGC

U20092up sequenced from RT-PCR results

GTCGACTCGCACTTGTGATGTAGGCACCACTAATACCGTC  
CCTTTCCCTTCTCTTTCTTTTCTCTTCTCCCTATTCTATC  
TTATTCATATTTTATTTCCCTCGTTTCGGATTTTGTGACCT  
TTTTCTGTGGAG

U26666up sequenced from RT-PCR results

TCCATATTTTATCCTTTTTCATTACACTACCTGTATGTGGC  
CAAGTATCCGCTGTTACATTATGTGTACTACTCTCATTCTG  
TGTCCCGTATTTCTCCTTGA ACTTCTGCTACTTTCCTCCT  
CTTGTGTTTTGGTACAG

U28866up sequenced from RT-PCR results

GACCCCTTGGTTCTCTCAAAGTTGTCCCTTTCGTGCGCGA  
ATTTTTTTTATCCGCATGAGCTCCTTGTTGATAAGTATAA  
TTCCTTCCGTATATTTGCTCGTTTAGTGTCTACACAGCTG  
TGGGAGCAAATATGTTTATATATTTGTTAATTTTTTCTCT  
TTCTTTTCTTTTTTACTTTCTTTCTTTTCAATCCACCTACT  
TCTATTACGATGCGCGTACAAAG

U29199up sequenced from RT-PCR results

GGGGTAGTTGGAAGGGATGCGTATGTGGCCGTTTTTTGTA  
AGCGCAACCTGCGGCAGAGTGATGTGGCTACTTTGCCTTC  
TTGTTTCTGTCTTGCCACAGTATTTCCCTCTTTTTTATTT  
TTTTCGCACTGTTCTGTCCCTGAAG

U43702up sequenced from RT-PCR results

AATTTTATTTTTCTATTCTTTTCCCTCTATTTGTCTTCC  
TTTGAGGTGAGTCCATGCTGACTCCAACGTGAAACCCTC  
CGAAGGTCCCCTATCTTGTTGGTGATCCATCCGCTTGTCC  
GAGCACATCTTCTTGTGGCGTGCTCCTATACTGCTATAGT  
GCCCTTTGTGTTCCCTTCACCGTATTTTCCCATCTTCATTC  
ATTTTCATTCTCCCTTATTATCTTCTATTTAATTATGCAA  
CTGCGTGGGCGGCAG

U52964up sequenced from RT-PCR results

GCTTCCC GGATTATAAGCAAGACAGGCTGAACAAGTGCTT  
TAGGCCTCTTTGAACCCCTTAAAGAAGGTAACAGTTGGCT  
TTCCTTACGGCTCATGTCAGTGCTTTAAAAGCCTTTGTCT  
TAGCTGGTTGCTCAACCCCTATTAATCACGCGATAAAGAT  
TAATGATGGCCTTTGCACCACCTTTCCCTNTCCCCTTCAC  
CCCACAAACGCGATGTATTTTCCC CGATATTGCGTTTAT  
CTGTTAAATGTGTTACCTTTCCCTTTATATACTCACTACA  
G

X05889.1up EST mapping

TTTTTTCTTTTACTTACTGTTAGTGGAACGTGTGTGTGTG  
TGTGTGTGTGTCATAGAACTGCTTTCCAGCAACGCATCGC  
ACCAGAAAATTAATATACCTTAGTCATTCCATTTCCCTATT  
GCGGGTACAACGATAACGGTGGTAAAACCGTCGGCGTTTT  
TTTTTTCTAAGT

X05889.2up EST mapping

TTTTTTCTTTTACTTACTGTTAGT

X05889.3up EST mapping

TGTACATCAGGCGAAGGGTTTGTTTTTTTTTTCTCCTGCC  
CTATGTTTTTCTGATGTCGTGGGAGTTTTGAATACTTTTA  
GTATATCGTTTATTATTTGTGAACGTTGTTTGAGAAGTAC  
ATAATGAAGTTTTTAGTCTTTTGATTCAAAAATTTAAACC  
GAATTCCCTTCCCAAGTCTCGCAGTCACTTCTTTTCAAC  
GTTTTCTCACTTAGCC

X05889.4up EST mapping

TGTACATCAGGCGAAGGGTTTGTTTTATGGAATTGTGTTT  
TTTAGGCCTTTTTATTTGTTGGTTAGGTATTGGTCCGTAC  
GTGACTATTATTTTTTTTTTAGGATAACATTTATGTTTTT  
TCTCTACTCATTTTTATTTTTTGGTACTATGTATCGATTGC  
ACAGTAATATTTCAATCGCTATGATATTTCTATCTTTTTG  
ATCGTTCTACTGTGTAACCTTTGTGTTTATCTTTGTTACTT  
CACTCTTTTTTCACTCAAATCGTTTGGGCTGCAGGC

X52584.1up EST mapping

GAATTCCTTCGTTTCGCTACGAAACAAAGCATTGGGTTTGG  
TGGCATTTAGTGCGGTGCCTTCGATGGTGTGTGCTTTCC  
TCTCCTGGAATGTGCTGGCTCGGGTTAAGATTTTAGCGGG  
TCGGGGGAATGCGGCCCAACTTTTTTGC GCGAAATCTCTT  
GCATTGACTTGCCGCGTAACCCATGGTGGTTTCGTCAGCC  
TGGTAGGAGCTGAGACAGCAGCATAATGGGTGGATTCTCG  
TATCCATTCGTGTGGGCATGCTCCCCACTTGCATGGGTTT  
CATTTTTGAAACATTGGTGCCTGGGGGTGTGTTCCGTAG  
GAAGGGCCGCGCGGTTGGGGCTTTAAAAGCACGACTGTAA  
CATCTATATAGTGAAGTGGCGGGTGTACGAGTTGGGAGTG  
CAACATTTGAGTGCGGTGTTTGTCTGCATGCCCCGACT  
GCTAGTTTTTCAGACTTCTTCGATGCCCGGTGTTTCGTAGC  
AAAACATACCGCTGCCGGCCTAAATGCCGCTGATTCACCA  
CAAAGTGCTTTTCAGTGCCCCCAAACCTGGATTGCCAAACT  
TCTGACAAGTGTATTGTTCCGAGTATGGTGAGCGAATCCC  
TTCTCTATTATCAATTCTCGAAAACCTCTTCGGGAGTCAGG  
GCCACGGAACCGAGGGGGCGGATGAGGGAGAGGGGGAAA  
CAACAATTCCGCACCGCGAACAGGCACCGCTCCCCTGGAC  
CTCTCCCTCAGATGTGAGGTGCAGTCAGCCTTTGTTGTCA  
TTGGGGTTAAGCGGAAAGGTGTGTGTCAGTAGGTTGTGAG  
GTGAAAGCGTTTTTCAGATGCATAGTGAGCTTAATGTCCTT  
TTCACAGTATATCGTGTCTGATAGGTATCTCTTATTAGTA  
TAGTCGAATACTAGTCAATAGTGCGTTTTTGTGCAAATGT  
CCATTTTGTGGCAGTGATGGGGTTGTTTTATGCTATTCCG  
TGTCTCTGGGTGGGCGTGCAATTGAAAATAGGGGTTATCGG  
GTGAGTACTGAGTTTAACATGTTCTCGTGATCGCTGCACG  
CGCCTTCGAGTTTTTTTTTCCTTTTCCCATTTTTTTCAAC  
TTGAAG

X52584.2up EST mapping

GCGGATGCAAGCGTGTAAAGCGCCTCGGAGGAACGAAACC  
CCTTTGAAAAGGTGGCTTTCGTTTATATATTTCTCCATCTG  
GTGCATCGTGTTTATTTTCGTATTATTCCCTGTCAAAGCT  
GCGGATATTCATTTAATATTTCTTTTCGTTATATATTTTFA  
GTTCTATCCTTTATTTTATCCGTTTTAATCGTCTTCTGAG  
ACCCACAGCCCTGTAGATTTCTGTGATGTTTCGGTTGCGT  
ATCCATAATTTTAAGCGTTTCACTTCTATTTTTTTTTCAT  
TCCTTTGAATTTGGATCTTAAAATTATCATTGGTGCCTTG  
TGTTATTGTGCGTGCTGCGTGTGAATGTGGCGCTCTGCCT  
TTTAATTTGTTGGATGAGCTATTTCAATTAATTTTTTTGCC  
TTCTCTTCTTTTGGGTTCGAATAATAGTTCCTTCTAAACC  
TTCAGGCCAGAAATGGGAAACAAGTGTTAGAACGGCCAAC  
TTGGGCGAAGGGGTCTGCATGTTGCTTTATTTTCATTGGTG  
GTTTTATGTGCAGTGTTTCCTGCTTCAGATGGGCCCCGC  
AGCTGAAGTTGTTTCGCTGCCCTGCCCCCACTGCTGCGT  
TTCTGCTGGAGAAACGATGTTGGAGGTTGACGGGTGTGTG  
CTTTTGAAGACTTTGTATGAATATGGAAGGAAGCTCGCAG  
CGGTTACTACAGGCAGTTAAGGGCTGAAGTGCTGTGCCTT  
TTCTATTGCCTCTCCCCCTCTTGAGCTATTCTTGTCGGGA  
GAGTGATTTATTTATCCGAGTTTCGGTTAATTGTCCCTTA  
GGGATGAAAGGCACCTCAGAGATGAGAGGGCAATGCAACG  
CTGGTTATCCAGTTGATGTGCGCATTCATATATAACCATT  
TCCCCATTTTTTTCAACTTGAAGA

X99951.1up EST mapping

ATCGTGCCGACCCTACCTACTTAAAATACACAATTCCCTT  
GCTTAAGGTGGTATGCCTCTCCCATTTATTTTCTTCATTT  
TTCATTCCTGACCTTCGTTTTGCCTTCGTTTGGTCCCCAC  
TTTCTGATGCCATGATTTCCCTCCGTTGTTGAATTTGCTAA  
TGTA CTCAGCGGCACTGCAGGGGCATAGGATCGTACGAGA  
ACCACCGTGTAAGGAACGTCAGAAGTGGCTGAATTA  
GAACTAGCGACATCCAGGTGAAGAGGGAAAAGGAAAGGG  
GAA

X99951.2up EST mapping

ACCTCTTATGGTGGCAATAGCATTGTCATTCACTGAACG  
GGTAAGCCATCGTTCCTACTGAAGGAGGAGCTTTGGAGGAAC  
TACACATGAAGGCTAGACGAGAAATTAGTGAAAGGATAGG  
AAACGGAAGGCAGCAATAGTGAAAAAGAATCTATGAAGTG  
AAGCAGATAGGTATTTTCTTTTGCCTTCACACGTGTATGG  
ATGCTTGCCGTTTGTGATTTAGTACGCAGTATCAAGCCAG  
CATAGACAGTGTGTAGCACTCCGTTTCGCTCTCTCCAGTAC  
TGAAAGGGAAGTGTTACGCCGAGGGCCATCGTATCTTCCC  
CCCTTTTTTATTTCGACTCATTTTATTCTTGCCTTCTTCTC  
AGCATTTTGTTATACCGTCTCTATCTTATCAATTCTATTG  
TTTTATTTTTTCATTTGGAAGAAGGTTTCAGTACACCACTG  
AACACCGTGGTTCATCTTTGGCCACTCGGCACACACCGG  
CGACTTAGATGCTCCGTCAGGCATATACGGCCGTCCCTTT  
CTTTTCTATCTTGGGTCTCCCCCTTTACAATATCTGCGCC  
ATGCACTCCCCACAGTCTACACATCTGCACATATATACAT  
ATATGTATACCTTTGTATATTGTTACATCTATTTGTGTAT  
TTACGCGTGTGTGTGTGCTAGTAGCTTCCCCTTTCACTT  
AATATGACGAAGTTCCTCCCCCTGTTACATGCCATTAAT  
TCATTCTGTTGTAAGCGTCGTTTCTATCAATTAAGGCCCA  
TGGTTTGTGTGTTGAGTGTAGTTATTTCTGTTATTCATT  
CATTCCCCCATTGTGTGTATTGTTGACCAAATCTGTTT  
TCCTTCGGTGTTCGGTGCCTCATCGTGGTGGTGTTCCTGC  
TGGTGATATTGACGTGTTGAAAGGTTTTTTTAATTCGTGG  
GATTGTGAGGCGTGTGGGGAAGTGACGGTAAGGAGAAGAA  
GAGGCGGATGAGGCAGCGCCGGCCAAATAACGTAACTTC  
CTGATGGGCACGTTACCCCGCACCCGGCCTCAATCTGCGG  
CTACTGCGCTTTGCGTAGATTTTTTTCTTTGCAATATATA  
GACGGTCAACTTCCTTTTTGTTTTCTTCACTTTTCTCGTC  
ACGTTTTTTTTGTTCAATATGCCCGTTTGAAGAG

Z54339.1up EST mapping

AAAAATTTTCAGCCACTGTAATCTGGCGAGACTGTACTGT  
GTCTACCTAATATTTGCGTCCACATCTGCTATTACCCTAT  
TGAATACCTTTCCCTCTCTCCTCTCTTTATTTTTACTGT  
TTGTTGGACTACCGCTTCGAAACAC

Z54340.1up EST mapping

TGAAGGATGAGGTGGCGTACATGTGATGGGGGACCACTTG  
AGTTCCAACGTGACGGCCGGTGCATGTAACCGCATTGTCA  
CCGACTACAATTTGTGGTGTATGGAGGCTTCGTTACCGT  
AGTGAGTTTTGTTATTTGTCTGACTTTTTAACTCTCCTGT  
TTGTTTTGTTTGTGTTTGTTCACATCCAGTACGTGTTT  
ACAATTTCCCCCTATTTTTTCGCTGAACAACGACTGT

Z96795.2up EST mapping

ACATAAGCAAGGGCAAGTACGCGAGATGTAGGGAGCGATC  
AGCGAAGGGGAAGAAAATAAAAAGGGAGAATAGTCAAAA  
AAGGACAGTCGAATCTTAGTTTTCTGGAAGTCTCTCGCTT  
TTTTAG

gi.11845510.emb.AL479829.1.TA209F02Pup EST mapping

GCGCTGACACGAAGGCATTTCGCATTCGCTTTTGGCACCCGC  
TAGCGCATTTACAGTGTGTATGTATCGGTGTGGCCGCAG  
GCGCTATGTAAGTGTATGCAAGGCAGCGTGTGCATGGCAAA  
GAAGTCGCTGTCAGCTGTTACCCGCGCCTGCTGCTGTTGC  
TGTGCGGTCACATAATCTTCTCTCCCCTTTGACTTGCGT  
GCGCTGCCCTCGTGTACCTGTGCGTTGAAGTGCAACTAC  
TTCTTTTTTCATTTCTTCTTCCACATTGTATTGCGGTG  
CTGTTACCTCCGATTTGTTGGTGTGTGCATA

gi.11846531.emb.AL480762.1.TA223D06Qup EST mapping

GCGCTCGTATCGGTAGCAGTTGTATCGTTGCGCCTTGGA  
ATCACTACACGACCACCGGTACGCACGACGTTTACGGGTA  
CGCCCTCGTAAGCAACGAGCTGACGGAGCGCGCGCTGGCC  
TCGCTTTGTGTAACGCGGCAGCATGGAGCGAAGTGTCCGG  
ATAAACACATCAGAGGGGCTACGGTGGTGAAGGGTCCAA  
GTTTCGGGTTGGACAGCTT

gi.11847700.emb.AL481105.1.TA243F09Qup EST mapping

AGCCCGGCGACGATCAGTCCTGTTGTTCTAAGCTCCATGC  
CTTCGTTTCAGGTTGCCCTTACCACTCGTCTTTTCGTTTCT  
TCCTCTTTTTTAACTTTTTTTTTTTTTTGCTTCCATTACATC  
TTCGTATGTGCGTGTGTGGGACTA



gi.11853678.emb.AL486758.1.TA286B10Qup EST mapping  
TTTCACGAAAAGTATTATTTATAAACATGTATGAAAATAG  
ATAGAATCAGAGGAAGTCAAAAAAATAAAAAAATACTGA  
GTAGACTGTGGTACATGCTTCATAATATATTGCTACGATT  
CAAAAAGCTAGTTATCCACTACAACCCCTGAATTCTTCTT  
TTCATTTTTTATTTCCCTGCAAAAAGGAAAAGAAGGCA

gi.11855065.emb.AL454261.1.TA35D08Qup EST mapping  
CTATCGATGTTCAATCGAGTTCTCCCACCGTTTGTTTTA  
GACCCCTCTTTCTGTTTTGGTAATGTGCCCTACTAAT  
TATGATTGTCGCTAACTAATCGTTGGTGTTCCTTATGTAT  
CTGTGATTTTATCCCCCTTTGAATATCGACTCTGATATTT  
CAATGTTTGCCGAAACCTCCCCCAGTTCAGGATAGCAGTG

gi.11855698.emb.AL455512.1.TA41G03Qup EST mapping  
TTGAGTAATTTTCGTGCCATGCCCTACATACAATAACCGTT  
TTTGGTTAAACTTGTACCTCTCCCCTATTTTTTTTTCTTT  
TCAAATTTCTACCACACATGCACTTCATACTATTCTTTTT  
AAATTATGTGTA

gi.11856123.emb.AL453946.1.TA45C06Pup EST mapping  
TATTTTACGTTGAGTACATGCCGTCGAAGTGCCGCGTAGA  
CGTCTGTGGGCCTCATCAGTGCAACCGAAGGAACCCTCTC  
NACCATCCTGCAGTTGCGGGGTGTGCGCGGTCGCTCACG  
TGCAAAAGTGCGTACCACAGACGGGTTTGTTTTTGCTCCT  
GGAATGCACTGTTTCGTGTGCAAGTACTCACTTGAAGAGG  
ATAAAATTGTTTCACGCATGGAAATAACTCCCTAGTATTT  
GCAAACCCTCTATGCCGTCCTTTCCCCCCTCCCCTCCTG  
ACTCTCATCTGATTCGCTTTTATTGTTGGCATTTTTAACG  
TATATGCGTGTA

gi.11859126.emb.AL458502.1.TA69F07Qup EST mapping  
CCGTTGTACGTGGACGCTTCTCGAAGAACGACGCCGAGTC  
GGGCTGATCGTAGTGCTCCTATTTAGTATTTGCGCCCTTTC  
ACTCCCATTTTACGCCCGTTGCTCGTCCTGTTTGCACCCA  
ATCCTATGGTCTCCTTTTGTATTCCACCTTCATTTAG

gi.11868795.emb.AL492612.1.TA339F07Qup EST mapping

ATTTGCGTGGTGTACACA ACTACTCGGAAGAGTTGGGGAA  
GCGGATGAGTATGAAGGCCATTATTTCAACCTTCGGAGT  
TATGGAGTGCATAGGCTGACACTGCCACCTGATTCAATG  
CGTTTTTATTAATCCTCTTCTATTGTGAAGAAGTATTTAT  
AGCAATTTTTTTGTTTTTACCGCAGTGATTTGTCATGGTT  
TGTCGTTGCATTCATCATATAATGCCTACTTTTCTG  
TCCGTGTTCTGTACGCATGTGTGTGTTTCGATGATCCCTT  
GCTTTTTTTTCTTTTCTTGATTGTCATTATCAGCGACGGT  
TATTTCCGCTTCCTATTCCATCAATAGTAGATTTTAAGTT  
TTTTTTTTTAGAACCGAATTAAGCCGGAGCAACCCCGACA  
CACAAAACAAAAAAAATTTTTTAAAAAAG

gi.11872246.emb.AL496323.1.TA372G07Qup EST mapping

GGTGAAGGGGTCGATGCTTTCGTTATGTCTCCTCTCATTC  
CTCCCCCGTACCGACATCCCACCGTATCGCTCTCCACCCC  
CTTGTTTTTTGTTTAATTTGTAGCCAATTTTGCTTCATCT  
TATACCCGTAG

gi.8429457.gb.AZ212557.1.AZ212557up EST mapping

ATTTGGGTCCCCTCAACCTGCTTCTTCTTCATTTGGTTTT  
TGGCGTAGCAAGCTGAGTAGCGCAAGGCTACCCGCTCTAT  
TTTCTGCCACAATCATGGCTGTTCGCTTACGAA

gi.8431613.gb.AZ213813.1.AZ213813up EST mapping

GGTAAGGAGAAAGGGAGGGGGGGGGGGTGGATGCGGCGA  
GAGATGCGGAACGGTGAGGGAAGGAAGAAAAGAAGACGCA  
TATATAGAATAAATGTGAAGTTGTAGTGGTGGCTCTGGCA  
TCTTCCCTTCTCGCTTTGTTGTGATATTCTCTCTTCACCC  
CGTTTTTAAACCTCCTCACCTTACGTAATTCGTGTTTTTTC  
GTTCTCAGCCCCCTCCGATAGGTCGTCCTTTTTTTCTTTTT  
TTTTGAAACCCGAGACGGTTCCCTGTAAGTATGAAACCAC  
GCATATTGCCTCATGCTCTTACATTACCCTTCGCTTCATT  
ACTAATGTAATCTTTCA

gi.8434002.gb.AZ216202.1.AZ216202up EST mapping

GCACCCTGATATCTCTAAAATAACGTCCCGGATCATGTGT  
TGCCGTGGCGCAGTTTTTACTTACCTCTTCCACCACTTGT  
ACTGCCACTTGCTTGACCTATATCGTTTTTTCTTTTCTTT  
CCTTTCCGTTTTCGCTACTTTTTCATTTTCGTTTAGATTG

gi.8434902.gb.AZ217102.1.AZ217102up EST mapping

CCTTCTCGCTTTGTTGTGATATTCTCTCTTCACCCCGTTT  
TTAACCTCCTCACCTTACGTAATTCGTGTTTTTTTCGTTCT  
CAGCCCCTCCGCTAGGTCGTCCTTTTTTTTCTTTTTTTTG  
AAACCCGAGACGGTTCCTGTAAGTATGAAACCACGCATA  
TTGCCTCATGCTCTTACATTACCCTTCGCTTCATTAATA  
TGTAATCTTTCAG

gi.8436463.gb.AZ218663.1.AZ218663up EST mapping

TTTCTCCATTTGTATGCAACCGCAGGGGAAATGCAACCCC  
AACGTTGCTCAGAATTCCTCACCCCTCTAAACGTAACGCAG  
CATCCTTAAGCGTTAGAAACAATAATAATTGGGCGAGGGG  
AGAGCGACATCTGTTTTGCTTCGCGTTTCTCTCTTCTGTT  
TTATGCATCATGTGAAGAAGGAGTTGTGGAAGGCGAAATA  
TCTTCGGGGTTTAATAATAAGGAGGAAGGTACGCGGCATT  
GATGGTATTGAAGCGCATTGTGAAATGTTTTTCTTCCCC  
TTTTTTTCGTCAGCAGCGGTGTTGCGGGCCGACCCCGCC  
ATCTCATATAATTGCCGTTCTGGAAGGCATGTGGTGGAAA  
CAAAAAGTGGAAGGTCCCCCTTTTTCTTGTTTTTTTTTTC  
ATCTCTCTCTCTCTCTCTTCCCTTGTGGAGCGA