

Text S1. Transposon sequences.

A) The sequences of *Sardine*, *Thon* and *Anchois* transposons reconstituted from manually adjusted multiple alignments of different decayed copies, cloned from the lambda phage library of MIC DNA (*Sardine*, *Thon*) or found in the PGM DNA assembly (*Anchois*). The sequences of the *Thon* transposon are those of the only known copy, so that ORF annotation (based on homology with the *Sardine* element) is preliminary; the *Thon* ORF1 sequence apparently contains a frameshift. Predicted introns have been removed from the ORF sequences.

B) Annotated comparison of *AnchoisA* and *AnchoisB*, showing the position and orientation of the ORFs, with a potential intron in the DDE transposase ORF.

C) Manually adjusted alignment used to reconstitute the *AnchoisA* element. Some PGM contig regions that correspond to imprecisely excised germline DNA have been included in this alignment.

D) Manually adjusted alignment used to reconstitute the *AnchoisB* element. Some PGM contig regions that correspond to imprecisely excised germline DNA have been included in this alignment.

E) IESs used to reconstitute *AnchoisA* and *AnchoisB* consensus sequences. The table provides the correspondence between the ParameciumDB IES accessions and the labels used in the alignments in C) and D). In a number of cases, “Alignment Length” is 2 nt longer than “IES Size”, since both flanking TA dinucleotides are included in the alignment. Some IESs used for the initial alignment and identification of *Anchois* (cf. Table S4) were not included in the final, manually adjusted alignments shown here.

A >Sardine consensus (6,673 nt with duplicated TAs)
TATAGCTGTTTGCCTAAAAAATATATAATTGATTTTCATAATATAATAATTAATTTATAT
TGAGTCAATATAATAAGCCTATTATATTGACTCAATATAAATGATTTATACTACAGAAAA
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TTTTATCATAATACAAATCAATTATATTGAGTCAATATAATAGGCTTATTATATTGACTC
AATATAAAATTTAATTATTATATTGAAATCAATTATATATTTTTTAAGCAAACAGCTAT
GTCTTTTTAAATATTAAGGATTtAATTAGTTTTAGTTAATTTCTATTGCAAAATTGTGTTT
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TTATATTGACTCAATATAAATTTAATTTATATTATGAAATCAATTATATATTTTTTAA
GCAAACAGCTATA

>Sardine consensus DDE cds

ATGCAAGTGCTGCAAAGACATTATAAAATAATAAGTCTTAGTTTGTAAATCATATTCCTAA
TCTCTAGAATAATAAAATCGATAAGAAAGTTAAATTTGAATACGAATGCTAGCCTATGCTT
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>Sardine consensus DDE pep

MQVLQRHYKIIISLSLQSYSQSLEQQNRQESQIEYECQPMLTRHPICNYSCLDFKKYISGS
EKIEITFPKVLPLPLKKCKQLIQSIITHKEEIEKKTCTKPKSLSIRRRYFKSVFPLTQ
DQREKIVELQLLKYRNSVISAILCISPSQVRQNTIRSTI IKYKEQIKITRTQSDWLEQA
SFQSNRSLFNARQFLSEFIEQFPNQRISIQQFRKILHGLNIRYRIPSLKPLQFFNKYGKS
EEMNRFVAKLCGYVFKQYKLIFIDECSLGNI SKASHKQWHVVGTFKEITHRISNFKYLIG
SLGDDCFLQYQIFSGTGKGFIFRDFLVEVIKKAQVFYQEKPFVLILDGCSIHKSSLVNDI
FEEIPIHYTPAYRPEFNAIEHMFGWIKRKIVSLQPSITSQFIYQIHQTIHQIDNLMQNW
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>Sardine consensus Y-recombinase cds

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AACTTCAGGTCTTGTTTACATTCGTAATTAATTAGTAATCCATTACATAGAGTGTTC
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AGTCTTATTTTAAATTTTTTAGGTGAAAATGATTTTGAATGA

>Sardine consensus Y-recombinase pep

MNEKSNQDGSALFETNNNINSKLRDLLDQYDYFAICKVCKLQVLFVFNQLVIIHYIECS
SFSNQSKEKGLIVETNQNNDYLNPEFDYNTFFFIQEIHNHTNFLQSILNVGNLSISSKTQYQ
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QMVVNGFINYIPQKQKRLGKIAERKFQITTSVQLQTQEFVKRNSICLLQTLDIGLHKQSI
KSQS FHKQLKYALKLIENRKNVLSNEYKEFLQNFQYHDLRYSKLOEMNKSIGIDEKIIQTF
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>Sardine consensus ORF1 cds

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ATGAGAGAAGCAACTtAAATTGTTGTACCTTTAGAGCAATTCTGTTAAGATTAACAGTAC
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TGA

>Sardine consensus ORF1 pep

MNQNNLFLKLQFFKYVPNTYNQCLICNELVCLQETNQOFEKKINEHLLSFNHLKAQKEIL
DQTGFLQNQTSINHESERQSYPLYDLQIARELNQIGLNLYFQNCILKLDNFLSKKQSTQK
EYGIILKRFYHMLFINQTNQISDQIIKFLQNEEYRHSISALRLLAKQAGHQISLQVQN
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FQDVLSDKIEINKEKFDKLRKTVLIGKSLQQAAKITLKVGLPLSSPIFPLIRNYRDIQ
SLLEKLEKKEYKQFLEAYNEETKQFIQNFHLSVIKFIKKSIIYPSKQIQSFLESQVANHKNS
NKQSDAAFPALEIFFAVFESIKQKQIIGNSKVNSIINNNVFKKRSKSELQIIRNRNIEQ
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>Sardine consensus ORF2 cds

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AAGAAGAAAACCTTTAGAAAAGTAAAATGGACAGAAAAGCTAAAAATAATTGATGATTATGAA
AAAGAATTAAGTTAATTGAAAACAAAATAAAGGATATCGAAGGGGAATGA

>Sardine consensus ORF2 pep

MQNI FQEEENEFKISRANQLIPSLESAYYGLLIQGYLPKLTSSIIITSEYLLGVLFEK
IYVFNLSEVQIGVLLKAVKKEYEIEEVQKIPIQQKTWIGIDQKHQPKDQWIINVLKTLKPN
HSFFQKYKTDSDYDMKIFTDQDIKKIKELDFSMGKKTNVKRFRI SKDKQMEADKQKKIL
KKKTLESKMDRKLKIIDDYEKELKLIENKIKDIEGE

>Thon (partial copy ; 5,262 nt with upstream TA)

TATAGCTGATTTTCATCAGCAAAATATACTTAATATTACTACAATATATATAAATTC AATT
AAAATTTTGAATTAAGTTAATATATTGATAATGTATTAAGTCAATAAAAATTC AACTATT
TTATTGACTTAATATAAAGTTTCTATTGGTGAAAAGATAAATATCTTTCCAGGTGAAAAG
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CAACTTAAGTATTAGGATATCTTGAATAATACTATTCAGAAGTCTACAAAATAATGGTTAA

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TTGGAAAAATCTAACTCGATACGACTACTTTTGTGTTACCTGAGGTTTCGCAGGATAAGA
GATTTGTAATCGCTTCTATGTTCAATTAACAGAAATTTGTTAAAAATAGAGAAGCACA
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TAAACGACTGATTAAGATTGAGCATAATTTAAGGAAGGAAATATTTATGAATTTAAAAA
CTTTATTATCATTTGTTTCATGACCATAAAGGCTGTTTCAATTACCAGTAATATCCTTAAT
CCTATCTTCGATAAAATTAATATCTTTTTTACATTCCTCAATAAGTTTGTGTTTGCATC
CATCTTAACCTCTAAATTTTTTTTCTTCAAATTCCTTCAAATTTATCTGCTTCTTATTG
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>Thon DDE cds

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CCATTAACATTTGATAAGCGAAAGGATATCTAGGAATTATAAATGAAACAATATAAAAAAT
TCAGTAATATCAGAGATCCTAGGAATTAGCACATAATAAGTGAGACAAAATCATATTAGA
CTTTAAATAAGTAAATCAAAGTAGAAATCAAATTAACAAAAGGTAGCAAAATTTGGTTG
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GAATTTTAAACTTAATTTCCAAAGCAACAAATTACAATCTCTCAGTTTTCGAAAGTTCTA
CATTAGTGCAATTTAAAAATATAGAATTCCTTCTTTGAAACCATTTCAGTTTTTTTTATAAA
GCTGGAAAAGATGAAGAAACAAAaTTTATATCTCAAATTTGTAGTTATCTCATAAATTCA
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GTAGAAATCTTTGATAAAATTCCTTGTATTTTTTACACCTGCTTATAGGCCAGAATTTAAT
GCGATTGAGCATATGTTTGGATGGTTAAAGAGAGGTCTAGTTGTATCTTAGCCAACCTTCC
ACAAACCAATTTATATATTTAAATCCATAGAATTATGAATTCATTACAGAGAATTTAATG
TAAAATTTGGTGTTAGAGTATTTACAAACCATTGCTTAAAGAATTGGATTATTTATGA

>Thon DDE pep

MNLDINNHAKQQDSISKHKFTKQQALKSQRIEEESTIVYECQPILGFHPTCNEQCLTFVQ
KIANQEKMNDFRIEKLQFSSLIQSRVTLKFFVVKQYQEKDMKQTKLLLKRKNQICKKRAT
PLTFDKRKDIQELQMKQYKNSVISEILGISTQQVRQNHRLQISKSKVEIKITKRQONWL
IENGSOQNSNILFNARSFLAEFQTQFPKQQITISQFRKVLHQCNLKYRIPSLKPFSSFFYK
AGKDEETKFIQSICYSYLNSYKIVFIDECSLGNIKSAHKQWHVLTGTFKESTQRLSSFKY
FIGALGEDNFQYQLFSGTGKAYIFQDFLISVINKAQKHYNQPFVLI MDNCSIHKSKQI
VEIFDKI PCI FTTPAYRPEFNAIEHMFGLKRGLVVSQPTSTNQFIYQIHRIMNSITENLM
QNWCSQSIYKPLLKELDYL

>Thon Y-recombinase cds (partial)

ATGCATTTATCAACCAATAAGAACAAGTTTCAAGAAATCTTAATTCTGAATTGATTTTC
GACAATGTACTAAATTCCTTATAAGTACAATACTATTTGCAAAAAGTGAATCAAGAAAT
CCTTTAACAGAGATAAATCATTTGATCATTCATTAATTTGATTGTCAATAGAATGCTCAT
TGTATTTCCCAAGATAAATAAATAAGCGAATAaTTCaCCCTGAACCATTGAGAAATCG
atGGGTCTTGAAAATTTGGCAAGCTACTCAgTGTCaAGAAAAAaaaaaataaAAAGTAATT
TAATAACTTCTTGATATTGGAAAGTTATCAAAGAATGtAAAATCTCTAAAGACCTGCA
TTAATAAAGTTATTTAAAAATTTTCGATGATTGTAATCTTCTCAATTTGTAGGCTTAACAA
CTAAAAAATATTGTGAAATATTAATGTAAAAGTACAAATTAAGTAATTAACAGTAAAAG
AAAATTTTAAAAGAAGGGATTCTCAAACGACCTCATCGATCATGGGATC

>Thon Y-recombinase pep (partial)

MHLSTKQEQVSRNLNSELIFDNVLNSYKYNTICKKCNQEIPLTEINHLLIHQIDCQQNAH
CISQDNQISEIQP*TI EKSMGLENWQATQCQEKKQKVIQQLLDIGKLSKECQNLQRPAL
LIKLFKNFDDCNLNLQAQQLKNIVKYQCKSTNQVIKQKILKEGILKRPHRSD

>Thon ORF1 cds (putative -1 frameshift at position 973)

ATGAATGATCAGAAATATCAACAACAAATGTCAGTATTTTAAACAGAATACAGAGACAGAA
TATAAATGTTTAAATTTGCTTTAAAACAATGATCATTTAATAAAGGCCATCCATTGATTCA
TAATTTAATGATCATTTTTTTATCCAAAGCGCATATGATTAGTTAATTTTTAAATTTTGTCT
GAACTTGGGTATTTTGATCAAGTATCCTTTGCATGTGATTTGTAAATAAATTCGGGCAAA
GAAATACAATTTAAGTTATAGTAAGCAAAGAATCTCAAAAATTAAGCAAAGAATGT
AAGATTTTACATATTTAGATCTaAATTGCTATTTTCAAAAATGCACGAAACAAATTAATG
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TATAATTTTTTATTTGAATTGGAAGCGGATTCTTATGAAGAGGATTTGGTCTTACGATTT
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ATTTGCTAAGCCTTATCTGGTGAATTCATTGATAAAAAATTAAAAACATAAAAGTAGATTAA
TAAACTTAAAATAGAGAAAAGGCCAAGTTAAGTATAAATTTGTGTAATAACTTATGGCG
TTTCTATTCACAATTCATAAGAAAGATTAGTCTTTCTGATATTTATATTGTTTTAATTT
GAAATGATCTAAAAGTTATCCCGCAACTTAAGTATTAGGATATCTTGAATAATACTATT
CAGAAGTCTACAAATAATGGTTAAAAGTCAAGTGAATAGATTTTGAAAATAAATAACTCG
ATATGTTAATTGATAATATAAATTTTTGGAAAAATCTAAACTCGATACGACTACTTTTGTG
TTACCTGAGGTTTCGAGGATAAGAGATTTGTAATCGCTTCTATGTTCAATTAACAGAA
TTTGTTTTAAAAATAGAGAAGCACAAATGACACGCTTGAAGAATTTATCTAAAACCTCACCT
TTTCAAAGATAAAAATTTATAAAAAACTTATTAATTTAGTGAGAAAAACAAGTAGACTGATAA
GTAAAAGAATATATCTATTTAATAAAGCAACAGTTTATGGTAGTACCATTCCCGGATTTA
TAAAACCTGTTTATATTTTTGTTTTGA

>Thon ORF1 pep (putative -1 frameshift corrected)

MNDQNINNKCYFKQNTETEYKCLICFKTMI IQQRPSIDSQFNDHFLSKAHMISQFQILL

ELGYFDQVSFACDLQINSKGEIQLFKLQQAKNLKNQSKECKILHIQIQIAIFKNARNKLM
ELIEKCWQVKTYRIILKRFYNFLFELEADSYEEDLVLRFLOREKFKQNSISAMQFLSKA
ICQALSGEFIDKNQKLVDDQQTQNRKAQVKYKLCQQLMAFLFNNSQERLVFLIFILFQF
EIDLKVIPLKYQDILNNTIQKSTNNGQKSSEQILKINNSICQLIIQFLEKSKLDTTTTFV
LPEVRRIRDLSLLCSIKTEFVQKIEKHNDTLEEFIQNFTFSKIKFIKNYQLVRKTSRLI
SKRIYLLIKRITVYGSTIPRFIKTVYIFV

>Thon ORF2 cds

ATGCAAAATATTCCTTTAGGAAGAGGAATATATGAAATTAACAAGGTAAGACGCCAATTAA
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AAGATGACTTCATCTATTATAACGTCGGAATACCTATTAGGCATTTTATTTGATAAAAATA
TATGCGcCCAAATTAGATGAAGTCTAAATAGGTGTGTTGCTAAAGTCTGTAACAAAGCAT
GAATTAATACAAGAATTAATTAAGATTCCTCTTCAATAATAAATTTGGGGAATTGAATCC
AAAAGAACTCCTGATAAGAAGCTGGATTATTAATGTGTTAAAAACACTTAAACCAAATCAT
ATTTTCTTTTAAAAGTACAAATAAGAGTCAAATTTTGATATGAAATTGCTTGCTTAGAA
TAATACAATAAAAATAAAGAATTGGATTTtATGGGGAAAAAGACAAGTGTGAAAAGATTC
TTCAGAAATTTTAAAGAGAAACAATAAGAAGCAGAATAATTTAGAAAGAATTTGAAGAAA
AAAAaTTTAGAGGTTAAGATGGATCGCAAACACAAACTTATTGAGGAATGTGAAaAAGAT
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>Thon ORF2 pep

MQNILQEEYMKLTRQDANQLIPSLESAYFLLMQGKYLPKMTSSIIITSEYLLGILFDKI
YAPKLEVDQIGVLLKSVTKHELIIQELIKIPLQQQIWIWIESKRTPDKNWIINVLKTLKPNH
IFFQYKQESNFMKLLALEQYNKIKELDFMGKTSVKRFFRIKFKEKQQAEEQFRKNLKK
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>AnchoisA consensus (3,599 nt with duplicated TAs)

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ATTGCAGAAAATATTTTCCAAGAGAATTTAAATTAGATAAAAATCTGCCTGGCTATTTTTT
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GCAAACATTTGCTCAACTTCATTATTTGGACAATCGAATATCAAGCTTCATCAATTTGTTT
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TAAACCATAAAAATATTCAATGCAAGCAATTAACAATAAAAAATTTCTCTACTCTTTTCTTAT
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AATAAGAGCAGAGTTTCGAATCGGGGGACAGGATGGGATCTAAAACACTCGCTCCTAAC
CTTCCAGCCTATTCTCAATACTATTAGACTCTGATTTAATTATATATTTTTAAAATTTGA
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TATTATTATAAAATTTATATAATCTGCAAAAGCAGAAAGTCAAATTTGATTTTACTATA

>AnchoisA consensus DDE cds
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GGAGAATTTTTGAATGAACCTCTAAGGCTGCTTTAGCAGAATAGTGAAGAAAATAATTTT
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TGGGGAGTAGCAAAACAAAAGCTCTCCAAAATGCACCTCGCAACAACATTTTAAAGAATTT
CACAACTTCAATTTGTGCTTAACCTCAATTACAGCTAATTAAGTGCAAAATATTTGCACC
TTTAACTTGAAATTTGCAAGCTTGCTTACATAGACAGCAGTTTTTGA

>AnchoisA consensus DDE pep
MQIETQASSSLRYPYAQTTCRHICDDHCQQFYQTYVYVEKRLLIKTKQQMLELLLTLEDAHK
IKQKLESTREVKLRKNINKFEKKSFKSLTLKQKIALELGNVSKPAILAGYLGISIGR
AKYLQKYVLQQPDLQRQQLAFKFDQHKFWIQKFVAQENVARLSSAKQIYQEFIANFHIC
KQQLQFHQFFKQFKQLWLYTYRLFSCVNFKSQTKCSLDRRFEFAKQLATLLNSKQKIVYI
DECSFGRNLKVARGWQKKNTPLLQIKSSSSKNKCVIGAIACDGFIAKCVIGNVNQQVF
GEFLNELRLRLLQONSEENNFCVLVDNASIHRTSQILDQLSYVNYLFLPPYSPQLNCIEKL
WGVAKQKLSKMHFATTFQEFHNIHFVLSITANQVQNICTFNLKFLQACLHRQQF

>AnchoisA consensus ORF1 cds
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GGACAATCGAATATCAAGCTTCATCAATTTGTTTGCCTTGAACAAAATTTAGAAAAATATG
GAAGAAGCTTTAAATATTGGAGGAGGGAAAAATCAACGAAGAAGAAACAAAAATGCATT
GAAAGAAATTTACAGCAGGTTTGGAAAATTTCCAATAGCACTAAATCAAAAGAAATCAA
CAAAGTGCACAAAGAAATTCGAAATTAGATATCAAAATTAGCGACCAAAATTTTAAAGCAA
CAGCAAATAAATATTTTAGAGAAAAGGAATAGCAAGAAAGCAATTAGAAAAGATAAACAA
TATGAAGAAATATTGTCAGAGAGCAAGCAAGAATTTGAGCAGAACATTTTAAAGAAA
GTGAAGAGAGTGGTAGAGAAGTGAAGTGTAAAGATGTATAAAAAGAGTTTATGAGGGAG
CAGGATGGGTATCGGCACCTTTGAGTTCCATCATAAGGATTTGAATGAAGAAGAGAAAAAG
TTCTTTGACTCGAGAAAGAAGAAAAAGGTTGCTGAAGCAGAATAGTAGCAGGATGAAAAA
TGA

>AnchoisA consensus ORF1 pep
MSEKVSSQSITCKHCSTSLFGQSNIKHLHQFVCVEQIQKNMEEALNIGGGKNQRRRNKKCI

ERILQQGLENFQQHQIKRNQQSAQRNSKLDIKISDQNFKQQQINILEKKEQQESNQKDKQ
YEEILSESKQEFEQNIILRKVKRVVEKWKQRCIKEFMREQDGYRHFHFHKKDLNEEEKK
FFDSRKKKKGAEAEQQQDEK

>AnchoisA consensus ORF2 cds

ATGATTTCCATTTTCTAAGCTAATCAAGCAACTGGTTCTGTTGAATCTATGTACTATGGC
TTAATCTTGGCAGGATATTATTTACCTGCAATTCATTCTTCAGGTGTAACAGCGTAATAT
TTGCTCAAAGTTGCCTACTAAATAATGCTTTGGCTTAGAATCAAAAAAGTTCAAATAGGA
TAACTGCTGAGATCAGCTACTAAAGAAGAAATTTTACATGAAATTAAGAAGCTTAAT
GGTTAAGAGCTTGGCTTTTCTGATGGAACCTACCCTGATAAACATGGGCAGTTAATGTT
CTTAAACAATAGAACCAAATCATTCTTTATTTAAAcCCTAAAGTGCAGGATTAATCAA
ATCTCACGCAGGATGATTTAATGTAAATATTTATCAACATAAGGTTGATTTCGCTAATTA
GACACTTCTATCGGAAGAAATAAAAGGCTGAGATATTTTCGCAGAACAAGGAGTAAGTT
GAGATATTTAAATAAAATGCAGCTAAGAAAAAGTTAGCTCGCAAAGAACTCATTTAAGCA
AAAAAGTTGCTAAAATTTATCAAAGTTAACTGAAGAATTAGAAATAGTGAATTAAGGAATT
TAAGAGGAAGTAGAATAGAGACAGCAATTCATAAGAAGAAATTGA

>AnchoisA consensus ORF2 pep

MISIFQANQATGSVESMYGLILAGYYLPAIHSSGVTAQYLLKVATKQCFGLESKKVQIG
QLLRSATKEEILHEIKKLNQELGFSQDGNYPDKTWAVNVLKTIEPNHSLFKTLKCRINQ
ISRRMIQCKIFINIRLIRQLDTSIGRNKRLRYFRRTKEQVEIFKQNAAKKKLARKELIQA
KKLLKLSKLTTEELEIVNQIQEEVEQRQQFQRRN

>AnchoisB consensus (3,621 nt with duplicated TAs)

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ATTTAAGCAATTTTTTTGCTTAAATAAGCTCTTTGCGAGCCTGCTTTTTCTTTGCTGCAT
CTTATTTAAATTTCTCAACTTGCTTCCTTCGTTCTGCGGAAATATCTCAACTTTTTTTGTTT
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AGCCAAGCTCTTAGCCATTTAGTTTTCTTTTAAATCTCGTGTAATAATTTCTCTTTAGTTG
CTGATCTTAGCAATTATCCTATTTGAACTTTTTTTGATTCTAAGCTATAGCATTTTTTTTG
TAGCAACTCTGAGCAAATATTACGCTGTTACACCTGAAGAATGGATCGCGGGCAAATAAT
ATCCCGCTAAGATTAATCCATAATACATAGATTCAACAGAACCAGTTGCTTAATTTGCTT
GTAATAATGGAAATCATAAAGAATTCATAATCTTTGTTCAATTAATTTAAAATGCAAAAG
CAAAATTTATATTGAAAAAAAATTCCTTTTCCAACCAATCAAATTGAAAGCAATTTATCG
CAATTAATAAATAAATAAAGAATAAAACAACAATAATTAATTTATTTTTTTAAA
TATAAATTATAACTAGCATTCTTATTGGATTATTTTTAAATTCAGATTTTTTTTCAAAAA
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CAGCTTCAACTTCTTCTCTGTAATAATATTTTGTATAGCAGGCCTTACACTTAACT
ACATTTATGTAGACATACATGCAATGATGACTGTCAATAATTTTATTAACCTATGTGTAT
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GCTTAAGATAATGTTGCACACTTTCAGCAGTGCAAAACAAATATATTAAGAATTCATTGTA
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GAAGAAAAATAATTTTGCCTTAGTGTGGATAATGCCTCCATCCACCGAACATAATAAAT
CTGAATCAATTATCATTGTTAATTTATTTCTTCCATATAGCCCTTAGCTTAAC
TGCATCGAAATGCTGTGGGGAATTGCTAAGCGATAGCTCTCTAAAATGCATATTGCAACT
ACTGCCAAGAATTTTATAATATACATGTTGTGCTTAACTCTATTACAACAACCTCAAGTT
CAAAACATCTGCACCTTCAAACCTAAAATTCCTAGAAGCTTGTGTTACGAAAATAATTC
TGATGCTATTATATAACAATTTAAATTTTAATATAAAGTTTCAATAGTAAATGAGCAAAA
GTCTCCGATTTCTTCGAATAGCGATGGTGTAGCAACTGCAGATTGTTAGTCTGGAATGCT
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GCTAAATCACTCGCTCCTTAATCTATCCAGCCAACCTCTCAATATAACAAGCCTTTTCAAT
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ATGAAATTGTATTGGACTATA

>AnchoisB consensus DDE cds

ATGTAATAGAACTCCAGCTTCAACTTCTCTCAGGCCTTACACTTAAACTACATTA
TGTAACATACATGCAATGATGACTGTCAATAATTTTATTAACCTATGTGTATGAAAA
AAAAAATTTTCATCAAAACAAAACAGCAATTGCAGGAATTGATTACTTTGGATGATGCG
CTTAAAATTTATATAGCAAAAATTTATAAACAAAAGGGGAAGAAACGCTAAGAAAAAGATT
AACAAACCTAAGAGAGCAAAATATATTTAAATCTTAACTTAACTTTCAAGTTAAAGTAAAT
GCTTAAGAATTAGGAATCTCTATAAAAACCTGCAATTTTAGCAGGATATTTAGGAATTTCA
ATTGGAAGGGCTAAAATATCTATAAAAAGTAAGTTTCGAGAGTATCCCGATTCTCTGAGTCAA
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GATAATGTTGCACACTTGAGCAGTGCAAAACAAATATATTAAGAATTCATTGTAAATTTT
CATATTAATCAATAACAACGCAATTTTCAATTTTATTTTAGTGGTTTAAAGCAACTGGG
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GAAAGAAGATTTGAATTTGCAAATAATTAECTACTCTTCTAAGTTAAAATTTAAAATTA
GTCTACATTGATGAATGTAGCTTTGGGAGAACTTAAAAGCTGGACGATGCTGGCAAAA
AAGAATAGTTATCCATTGCTGTAATAAAAATCGAACTCCTCAAAAAGTAAATGTGTAATT
GGTGTCTATCTGTTGTGATGGGTTTATTGCTTATAAATGTGTTATCGGAAATGTAAATCAA
TAGGTATTTGGAGAATTTTGAATGAACTTTTAAAGCTGCTTTAGCAAAAATAATGAAGAA
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CAATTATCATTGTTAATTTATTTCTTCCATATAGCCCTTAGCTTAACTGCATC
GAAATGCTGTGGGGAATTGCTAAGCGATAGCTCTCTAAAATGCATATTGCAACTACTGCC
TAAGAATTTTATAATATACATGTTGTGCTTAACTCTATTACAACAACCTCAAGTTCAAAA
ATCTGCACCTCAAACCTAAAATTCCTAGAAGCTTGTGTTACGAAAATAATTTCTGA

>AnchoisB consensus DDE pep

MQIETPASTSSLRPHYTQTLRHTCNDDCQQFYQTYVYEKKKIFIKTKQQLQELITLDDA
LKI IQQLQTKREETLRKKINKPKRANIFKSQLTFKFKQIAQELGTSIKPAILAGYLGIS
IGRAKYLQKQVREYPDSLSQQFAFSFDEQHKLWIEKFVAQDNVAHLSSAKQIYQEFIVNF
HINQQQLQFHSSFFQWFKQLGLYTYRLLSCFNFKSQTCKSLERRFEFAKQLTLLSQNQL
VYIDECSFGRNLKAGRCWQKNSYPLLQIKSNSKSKCVIGAIICDGFIAKCVIGNVNQ
QVFGEFLNELLKLLQONNEENNFLVLDNASIHRTQQILNQLSfVNYLFLPPYSPQLNCI
EMLWGIKRQLSKMHIATTAQEFYNIHVVLNSITTTQVQNICTSNLKFLEACLLRKQF

>AnchoisB consensus ORF1 cds

ATGTCTGAAATATAACCAACTAGCCATAACTTGCCAATATTGCCAGAAAGTATTGTTT
GGGTAATTGAACATCAAGGCCATCGTTTTATTTGTATTGAACAATTGAAGAAAAATTTG
GAATTAGAATTATAGGTTGGCTAAGGAAAAATCAACGCAGGAGAACAAAAAAGTTTATA
GAAAAAGTATTGTAGCAAGGTTTAGCAAACCTCCAATAAAATGAATCTAAAAGAAATTC
GATCATAAGCAAAGGACCTAACACTTAGATGAAAAAATGCTAAAAGACAATATTTAGCAA
TAGCAATTTAAAATTTTCAGAAAACCTAGCAACAGCAGGAAATAAAATAAACAGAAAAATAG
GCTGAAGAAATAGTAGCAGAAAAAATCAAGATGTAGAGCAGAATATTTATTTGAAGAAA
GTTAAGAGAATAGTTGAGAAATGGAATGCTAGAAATGCATTAAGAATTCATAAGGGAA
CAGGATGGATATCGACATTTTGTAGCACCATCATAAAGATTGTAACGAAGAGGAGAAAAA
TTCTTTGAGCAGAGAAGAAAGAAAAAAGTTGCAGAATCATAGCAATAGCAAGAAGAAAA
TGA

>AnchoisB consensus ORF1 pep

MSEIQPNQPITCQYQKVLFGQLNIKAHRFICIEQLKKNLELELQVGQGNQRRRTKFKFI
EKVLQQGLANFQQNESKRNSDHKQRTQHLDEKNAKDNIQQQQLKISENQQQQEIQQTEKQ
AEEIIVAEKNQDVEQNIILKKVKRIVEKWKCKQCIKEFIREQDGYRHFHHHKDCNEEEKK

FFEQRRKKKVAESQQQQEEK

>AnchoisB consensus ORF2 cds

ATGATTTCCATTTTACAAGCAAATTAAGCAACTGGTTCTGTTGAATCTATGTATTATGGA
TTAATCTTAGCGGGATATTATTTGCCCGCGATCCATTCTTCAGGTGTAACAGCGTAATAT
TTGCTCAGAGTTGCTACAAAAAATGCTATAGCTTAGAATCAAAAAAGTTCAAATAGGA
TAATTGCTAAGATCAGCAACTAAAGAGGAAATTTTACACGAGATTTAAAAGAACTAAAT
GGCTAAGAGCTTGGCTTTGCTGATGGAAACTACCCTGATAAAACATGGGCAGTCAATATT
CTAAAACGATAGATCCGAATCATTCTTTATTCAAGAACCcaAAGTGCAAGATTAATCAA
ATCTTACGCAAGATGATCTAATGTAACAGTTATTTCAATTAAGTTTGATTTCGTTAATTA
GATACATCTATTGGAAGAAACAAAAAGTTGAGATATTTCCGCAGAACGAAGGAGCAAGTT
GAGAAATTTAAATAAGATGCAGCAAAGAAAAAGCAGGCTCGCAAAGAGCTTATTTAAGCA
AAAAAATTGCTTAAATTATCAAAGTTAACTGAAGAGTTAGAATAAATAAATTAAGGAATT
TAAGAAGAAGTTTAAATAAGCGCAGTCGTTTTAAAGAAGAAATTGA

>AnchoisB consensus ORF2 pep

MISILQANQATGSVESMYGLILAGYYLPANHSSGVTAQYLLRVATKKCYSLESKQVIG
QLRSATKEEILHEIQKLNQELGFADGNYPDKTWAVNILKTIDPNHSLFKNPCKINQ
ILRKMIQCNSYFNQSLIRQLDTSIGRNKKLRYFRRTKEQVEKFKQDAAKKKQARKELIQA
KKLLKLSKLTEELEQINQIQEEVQQAQSFQRRN

B AnchoisA 1 TATAGTCCAAAAATTATTGCAGATTTAAGTGTCTTTGAGTTGCAAAAATTAACTTTTCTTTGCTGAAGCAGAAAGAAACAA
AnchoisB 1 TATAGTCCAAAACAATTTCAGCCAACATTCACCTTTGAGTTGCAAAAATCAATTTTATTTTGTCTATTGCCAAAGCCAAGTA

AnchoisA 81 GAAAT-----AAATTGATATA-----TTATGAAATAAGAAATTTTTAATAT--TTTTTCCCAATGTGATTCTCTCCC
AnchoisB 81 AAAATGAACCAAGTTTATTATAAAGCAGGTTGAAGGA-AATTTTTGATAATAATTTTCTTATAAATTAATT-----

AnchoisA 146 TAAATTTGCATTAATATATTTCTGTCTGTTAATTTGCTGTTATA---ATAGTTTATAA---ATATTAG---ATAAAA
AnchoisB 153 TAACTT---CTAATATTTTTGTGC-----ACTTTTATATATATGTCTTATAATAATATATTTCGATTATATGA

AnchoisA 215 TAAAAAAATAAATTAAGTGAATTTAATTCGAGAAAATATTTTCCAAGAGAAATTTA--AATTAGATAAAATCTGCCTGGC
AnchoisB 220 TATATAAGCAAAAGTAAACGCAATTTTATCGCAGCAAAATTTTTTTCAGGATATTTTATTAATT---TAAATTAATGTATGTCT

AnchoisA 293 TATTTTTCGTTTTTCAATATTATCATCAAAATAAATGCTCTGAAAAGGTTTCCAGCTAATCTATAACTTGCAAACATTGCT
AnchoisB 297 TATTTTTTG-TTTTCATTTGTTATTTCA----AAATGCTCTGAAAATATAACCCAACTAGCCATAACTTGCCAATATTGCC
ORF1 > M S E K V S S Q S I T C K H C
ORF1 > M S E I Q P N Q P I T C Q Y C

AnchoisA 373 S T S L F G Q S N I K L H Q F V C V E Q I Q K N M E E
AnchoisB 372 CAACTTCATTATTTGGCAATCGAATATCAAGCTTCATCAATTTGTTTTCGTTGAACAAATTTAGAAAAATGGAAAGAA
372 AGAAAGTATTGTTGGTAATGAACATCAAGGCCATCGTTTATTGTTGATTGAACAATTGAAGAAAAATTTGGAATTA
Q K V L F G Q L N I K A H R F I C I E Q L K K N L E L

AnchoisA 453 A L N I G G G K N Q R R R N K K C I E R I L Q Q G L E
AnchoisB 452 GCTTTAAATTTGGAGGAGGAAAAATCAACGAAAGAGAAACAAAAATGCATTTGAAAGAAATTTACAGCAGGGTTTGA
452 GAATTAAGTTGGCTAAGGAAAAATCAACCGCAGGAGAAACAAAAAGTTTATAGAAAAGTATTGTGACAAAGTTTTAGC
E L Q V G Q G K N Q R R R T K K F I E K V L Q Q G L A

AnchoisA 533 N F Q Q H Q I K R N Q Q S A Q R N S K L D I K I S D
AnchoisB 532 AAACCTCCAATAGCCTAAATCAAAAGAAATCAACAAGTGCAAAAGAAATTCGAAATTAGATATCAAAATAGCGACC
532 AAACCTCCAATAAATGAAATCTAAAGAAATTCAGATCATAGCAAAGGACCTAACACTTAGATGAAAAATGCTAAG
N F Q Q N E S K R N S D H K Q R T Q H L D E K N A K

AnchoisA 613 Q N F K Q Q Q I N I L E K K E Q Q E S N Q K D K Q Y E
AnchoisB 612 AAAATTTAAGCAACAGCAAAATAATTTTAGAGAAAAGGAAATAGCAAGAAAACAAATAGAAAAGTAAACAATATGAA
612 ACAATATTAGCAATAGCAATAAAAATTTAGAAAACAGCAACAGCAGGAAATAAATAAACAGAAAAATAGGCTGAA
D N I Q Q Q Q L K I S E N Q Q Q Q E I K Q T E K Q A E

AnchoisA 693 E I L S E S K Q E F E Q N I I L R K V K R V V E K W K
AnchoisB 692 GAAATATTGTAGAGAGCAAGCAAGAATTTGAGCAGAACTATTATTTAAGAAAAGTGAAGAGAGTGGTAGAGAAAGTGGAA
692 GAAATATTAGCAGAAAATAAATCAAGATGTAGAGCAGAAATATTATTTTGAAGAAAAGTAAAGAGATAGTTGAGAAATGGAA
E I V A E K N Q D V E Q N I I L K K V K R I V E K W K

AnchoisA 773 C Q R C I K E F M R E Q D G Y R H F E F H H K D L N
AnchoisB 772 GTGCTAAGATGTATAAAGAGTTTATGAGGGAGCAGGATGGTATCGGCACCTTTGAGTTCCATCATAAGGATTGAAATG
772 ATGCTAGAAATGCATTAAGAATTCATAGGGAAACAGGATGGATATCGACATTTTGTAGCACCATCATAAAGATTGTAACG
C Q K C I K E F I R E Q D G Y R H F E H H K D C N

AnchoisA 853 E E E K K F F D S R K K K K G A E A E Q Q Q D E K * > ORF1
AnchoisB 852 AAGAGGAGAAAAATTTCTTTGAGCTCGAGAAAGAGAAAAAGTGTGAGAGCAATAGTAGCAGGATGAAAAATGAGAT
852 AAGAGGAGAAAAATTTCTTTGAGCAGAGAAAGAGAAAAAGTGTGAGAAATCATAGCAATAGCAAGAGAAAAATGATAT
E E E K K F F E Q R R K K K V A E S Q Q Q Q E E K * > ORF1

AnchoisA 933 ACCATAAAATAT---ATTAATAAATGCATGAATAATTTTCTACTTCTTTTTCAATAATA---TCATTTCTTCTTTAGA
AnchoisB 932 ATATATAAATATAAATTAAGCAATATTG---ATCTTTTGTGTTTGTATTAATAATTATTCATTTCTTCTTTAAA
ORF2 < * N R R Q F
ORF2 < * N R R Q F

AnchoisA 1006 Q Q R Q E V E E Q I G Q N V I E L E E T L K S L K L
AnchoisB 1009 ATTGCTGTCTCTATTCTACTTCTCTTAAATCCTTAAATCCTATTTCTAATTTCTTCAAGTTAACTTTGATAAATTTAGC
1009 ACGACTGCGCTTATTAAACTTCTTCTTAAATCCTTAAATTTATTTATTTCTAACCTTTCAGTTAACTTTGATAAATTTAAGC
S Q A Q Q V E E Q I G Q N I Q E L E E T L K S L K L

AnchoisA 1086 L K K A Q I L E K R A L K K K A A N Q K F I E V Q E K
AnchoisB 1089 AACTTTTTTGTCTTAAATGAGTCTTTTGCAGCTAACTTTTTTCTAGCTGCATTTTATTAAATATCTCAACTTACTCCTT
1089 AATTTTTTGTCTTAAATGAGTCTTTTGCAGCTGCTTTTTTCTTTGCTGCATCTTATTAAATTTCTCAACTTCTCCTT
L K K A Q I L E K R A Q K K K A A D Q K F K E V Q E K

AnchoisA 1166 T R R F Y R L R K N R G I S T D L Q R I L R I N I F I
AnchoisB 1169 TGTTCGCGAAAATATCTCAGCCTTTTATTCTTCCGATAGAAAGTGTCTAATTAAGCAATCAACCTTATGTTGATAAATA
1169 CGTTTCGCGAAAATATCTCAACTTTTTGTTTCTTCCAATAGATGTATCTAATTAACGAATCAACTTTAATGAAATAAC
T R R F Y R L K K N R G I S T D L Q R I L S Q N F Y S

AnchoisA 1246 K C Q I M R R S I Q N I R C K L T K F L S H N P E I
AnchoisB 1249 TTTTACATTAATCATCTGCGTGAGATTTGATTAATCCTGCCTTTAGGGTTTAAATAAAGAAATGATTGGTTCTATT
1249 TGTTCATTAATGATCATCTGCGTAAGATTTGATTAATCTTGCCTTTGGGTTCTTGAATAAAGAAATGATTGGATCTATC
N C Q I M K R L I Q N I K C K P N K F L S H N P D I

AnchoisA 1326 T K L V N V A W T K D P Y N G D S F G L E Q G N L K K
AnchoisB 1329 GTTTTAAAGAACATTAACTGCCATGTTTATCAGGGTAGTTTCCATCAGAAAAGCCAAGCTCTTAAACATTAGCTTCTTT
1329 GTTTTAAAGAAATTAGCTGCCATGTTTATCAGGGTAGTTTCCATCAGCAAAGCCAAGCTCTTAGCCATTAGTTTCTTT
T K L I N V A W T K D P Y N G D A F G L E Q G N L K K

AnchoisA 1406 K I E H L I E E K T A S R L L Q G I Q V K K S E L G F
AnchoisB 1409 TTTAATTCATGTAATAATTTCTTCTTAGTAGCTGATCTCAGCAGTTATCCTATTTGAACTTTTTTGTATTGATTCAGCAA
1409 TTAATTCATGTAATAATTTCTTCTTAGTAGCTGATCTTAGCAATTAATCCTATTTGAACTTTTTTGTATTGATTCAGCAA
Q I E H L I E E K T A S R L L Q G I Q V K K S E L S Y

C Q K T A V K L L Y Q A T V G S S H I A P L Y Y G A
 AnchoisA 1486 AGCATTATTTAGTAGCAACTTTGAGCAAATATTACGCTGTTACACCTGAAGAATGAATTCGAGGTAAATAATATCCTGCC
 AnchoisB 1489 AGCATTATTTTGTAGCAACTCTGAGCAAATATTACGCTGTTACACCTGAAGAATGATCGCGGGCAAATAATATCCCGCT
 C K K T A V R L L Y Q A T V G S S H I A P L Y Y G A

 L I L G Y Y M S E V S G T A Q N A Q F I S I M < ORF2
 AnchoisA 1566 AAGATTAAAGCCATAGTACATAGATTCAACAGAACAGTTGCTTGTATTAGCTTAGAAAAATGGAATCATGATGAAATTCGA
 AnchoisB 1569 AAGATTAAATCCATAATACATAGATTCAACAGAACAGTTGCTTAAATTTGCTTGTAAAAATGGAATCATAAAGAAATCTAA
 L I L G Y Y M S E V S G T A Q N A Q L I S I M < ORF2

 AnchoisA 1646 AAGTTTGTTAATTATTCAAACAATGCGATAGT-AAATTTTATTGAAAAAAAAAATTCCTTTTAAACCAATCAATTCAA
 AnchoisB 1649 ATCTTTGTTCATTAATTTAAAAAATGCAAAAGCAAAATTTATATTGAAAAAAAAAATTCCTTTTCAACCAATCAAAATTGAA

 AnchoisA 1725 AGCAATTGATT-----TTAAAAAGCAGAAAAACAATTTAGAATAAAATTAAGAAAAATATTAATGATTTATAATTTAATG
 AnchoisB 1729 AGCAATTATCGCAAATTAATAAATAAATAAAGAAATAAAACAAAATAATA-----TTATTTTTTAAATA

 AnchoisA 1800 CAACCTTAAACTGCTTTTTATTGAAATTAATTAATAAGGATTTTTTGTTTGAATGGAGAAAAATTTTTG--AT
 AnchoisB 1803 TAAATTAACATAGCATCTTTATTGGATTATTTTTAAATTCAGATTTTT--TCAAATAATGACAAAAATTTTTTCCAT

 AnchoisA 1878 TCAATTTTGATTA-----TTGATTCGAATTTTAGATTAT-AGCTCCAATTTTATGCAAGAAATTTAATTTTCCAC-
 AnchoisB 1881 TCAATTTGTATTATTGGATGTTGGTATGAATTTTAGAATATGAAATCTTATTTAT-TGCAATAAATTCATTATTTCATA

 DDE > M Q I E T Q A S S S L R P Y A Q T
 AnchoisA 1949 ATTTAATGTAAATAGAACTCAAGCTT--CTTCATCTCTGTACATATATTATTGCTATAGCAGGCCATATGCTTAAAC
 AnchoisB 1960 ATTTAATGTAAATAGAACTCCAGCTTCAACTTCTTCTGTATAATATTATTGCTATAGCAGGCCATTACATTTAAAC
 DDE > M Q I E T P A S T S S L R P Y T Q T

 T I C R H I C D D H C Q Q F Y Q T Y V Y E K R L L
 AnchoisA 2026 AACAAATATGTAGACACATATGCGATGATCATGTCTAATAATTTTACTAAACCTATGTTATG-----AAAAAGACTTTTAA
 AnchoisB 2040 TACATATGTAGACATACATGCAATGATGACGTCAATAAATTTTATTAACCTATGCTATGAAAAAATAAATTTTCA
 T L C R H T C N D D C Q Q F Y Q T Y V Y E K K K I F

 I K T K Q Q M L E L L T L E D A H K I I K Q K L E S T
 AnchoisA 2103 TCAAAACCAATAGCAATGCTGGAACTGCTTACTCTAGAGGATGCTCATAAATTAATAAAACAAAAATAGAAATCCACA
 AnchoisB 2120 TCAAAACCAACAGCAATGCGAGAAATGATTTACTTTGGATGATGCGCTTAAATTTATAGCAAAATTTATAAAACAAA
 I K T K Q Q L Q L Q E I T L D A L K I I Q Q K L Q T K

 R E V K L R K N I N K F E K K S N F K S L T L K L Q
 AnchoisA 2183 AGGGAAGTAAAGTTGAGAAAAAATATAAACAATTTGAGAAAAAAGCAACTTCAAATC---ATTAACTTTAAATGCA
 AnchoisB 2200 AGGGAAGAAACCTAGAAAAAAGATTAACAACCTAAGAGAGCAAAATATATTAAATCTTAACCTTTCAAGTTAA
 R E E T L R K K I N K P K R A N I F K S Q L T F K L K

 K I A L E L G N S V K P A I L A G Y L G I S I G R A
 AnchoisA 2260 GAAATTTGCTTTAGAAATAGGAAATTCGGTAAACCTGCAATTTTGGCAGGATATTTAGGAATTTCTATTGGAAGAGCTA
 AnchoisB 2280 GTAAATTTGCTTTAAGAATTAGGAACTTCTATAAAACCTGCAATTTTAAAGCAGGATATTTAGGAATTTCAATGGAAGGCTA
 Q I A Q E L G T S I K P A I L A G Y L G I S I G R A

 K Y L Q K Y V L Q Q P D L Q R Q Q L A F K F D A Q H K
 AnchoisA 2340 AATATTTATAAAGATAGTTTTCAGCAACCTGATTTCAGAAAGACAATAAATCTGCTTTTAAATTTGATGCATAACATAAA
 AnchoisB 2360 AATATCTATAAAGATAGTTTCAGAGATATCCCGATTCTCGAGTCAATAAATTTGCTTTTTCATTTGATGAATAGCAAAA
 K Y L Q K Q V R E Y P D S L S Q Q F A F S F D E Q H K

 F W I Q K F V A Q E N V A R L S S A K Q I Y Q E F I A
 AnchoisA 2420 TTTTGGATTAAAAATTTGTAGCTCAAGAAATGTTGCTCGCTTGGAGCAGTGCAAAATAAATCTATTAGAATTTATAGC
 AnchoisB 2440 TTTATGGATTGAAAAATTTGTAGCTTAAGATAATGTTGACACTTGGAGCAGTGCAAAATAAATAATTAAGAATTCATTGT
 L W I E K F V A Q D N V A H L S S A K Q I Y Q E F I V

 N F H I C K Q Q L Q F H Q F F K Q F K Q L W L Y T Y
 AnchoisA 2500 AAATTTTCATATTTGCAAAATGCAACTGCAGTTTCATTAATTTTTAAGTAGTTTAAACAGCTTTGGTTATATACCTATC
 AnchoisB 2520 AAATTTTCATATTTAATCAATAACAACCTGCAATTTTCATTTTTTTAGTGGTTTAAAGCAACTTTGGTTGTATACCTATC
 N F H I N Q Q Q L Q F H S F F Q W F K Q L G L Y T Y

 R L F S C V N F K S Q T K C S L D R R F E F A K Q L A
 AnchoisA 2580 GCTTATTTAGTTGCGTTAATTTTAAATCTCAACTAATGTTCTTTTAGACAGAAAGTTTGAATTTGCAAAATAATTAGCT
 AnchoisB 2600 GCTTACTTAGTTGCTTTAATTTTAAATCTCAAACTCAATGCTCTTTTAGAAGAAGATTTGAATTTGCAAAATAATTAAC
 R L N F K S Q Y T K C S L E R R F E F A K Q L T

 T L L N S K Q K I V Y I D E C S F G R N L K V A R G W
 AnchoisA 2660 ACTCTTTTAAATTTCAAAATAAAAAATTTGTTTACATTGATGAGTGCAGTTTTGGGAGAAAATTTAAAGTTGCAAGAGGTTG
 AnchoisB 2680 ACTCTTCTAAGTTTAAATTTAAAAATTTAGTCTACATTGATGAGTGTAGCTTTGGGAGAAAATTTAAAGCTGGACGATGCTG
 T L L S Q N Q K L V Y I D E C S F G R N L K A G R C W

 Q K K N T F P L L Q I K S S S S K N K C V I G A I A
 AnchoisA 2740 GTAAAAAAGAACACTTTTCCATTATGCAAAATTAATCAAGCTCATCAAAAAATAAATGTTGTTATTGGAGCTATAGCTT
 AnchoisB 2760 GCAAAAAAAGAAATAGTTATCCATTGCTTAAATAAATCGAACTCTCAAAAAATAAATGTTGTTATTGGTGTCTATCTGTT
 Q K K N S Y P L L Q I K S N S S K S K C V I G A I C

 C D G F I A Y K C V I G N V N Q Q V F G E F L N E L L
 AnchoisA 2820 GTGACGGGTTTATTGCTTCAAAATGTTTATAGGAAATGTTAATCAATAGGTTTTTGGGAGAAATTTTGAATGAACCTCTA
 AnchoisB 2840 GTGATGGGTTTATTGCTTAAATGTTTATCGGAAATGTTAATCAATAGGTTTTTGGGAGAAATTTTGAATGAACCTTTA
 C D G F I A Y K C V I G N V N Q Q V F G E F L N E L L

 R L L Q Q N S E E N N F C L V L D N A S I H R T S Q I
 AnchoisA 2900 AGGCTGCTTTAGCAGAAATAGTGAAGAAAAATAATTTTTGCTTGTGCTGGCAATGCATCTATCCAACGACATCAAAAT
 AnchoisB 2920 AAGCTGCTTTAGCAAAATAATGAAGAAAAATAATTTTTGCTTGTGCTGGCAATGCATCTATCCAACCGAACATATAAAT
 K L L Q Q N N E E N N F C L V L D N A S I H R T Q Q I

L D Q L S Y V N Y L F L P P Y S P Q L N C I E K L W
 AnchoisA 2980 TTTGGATTAATTGTCATTATGTGAACATTTATTTCTCCACCATATAGTCCTTAGCTTAATTGCATTGAAAAGCTATGGG
 AnchoisB 3000 TCTGAATCAATTATCATTTGTAAATTTATTTCTCTCCATATAGCCCTTAGCTTAACTGCATCGAAAAGCTGTGGG
 L N Q L S F V N Y L F L P P Y S P Q L N C I E M L W

 G V A K Q K L S K M H F A T T F Q E F H N I H F V L N
 AnchoisA 3060 GAGTAGCAAAACAAAAGCTCTCCAAAATGCACTTCGCAACACATTTTAAGAATTTCAACAATTCATTTTGTGCTTAAAC
 AnchoisB 3080 GAATTGCTAAGCGATAGCTCTCTAAAATGCATATGCAACTACTGCCAAGAATTTATAAATACATGTTGTGCTTAAAC
 G I A K R Q L S K M H I A T T A Q E F Y N I H V V L N

 S I T A N Q V Q N I C T F N L K F L Q A C L H R Q Q F
 AnchoisA 3140 TCAATTACAGCTAATTAAGTGCAAAATATTTGCACCTTTAACTTGAAATTCCTGCAAGCTTGCTTACATAGACAGCAGTT
 AnchoisB 3160 TCTATTACAACAACCTCAAGTTCAAAACATCTGCACCTCAAACCTAAAATTCCTAGAAGCTTGCTTGTACGAAAATAATT
 S I T T T Q V Q N I C T S N L K F L E A C L L R K Q F

 * > DDE
 AnchoisA 3220 TTGAT-TAATTATATTTTCATTTAAACATAAATA----TTCAATGCAAGCAATTAACAATAAAAAATCTCTACTCTTT
 AnchoisB 3240 CTGATGCTATTATA-TACAATTTAAATTTTAAATATAAAGTTTCAAT---AGTAAATG--AGCAAAAAGTCTCCGATTCCT
 * > DDE

 AnchoisA 3295 TCTTATAGCGACAGTGT-GCAAAGCAGACT-TTCGTCAGTTATAC-TTAACACTATCGAGCAGATATTAATAAGAGCAG
 AnchoisB 3314 TCGAATAGCGATGGTGTAGCAACTGCAGATTGTTAGTCTGGAATGCTTTAACACTTTCAGCAGATTTAGTTCGAAGCAG

 AnchoisA 3372 AGTTTCGAATCGGGGGACAGGATGGGATCTAAAACACTCGCTCCTTAACTTTCCAGCCTATTCTCAATACTATTAGACT
 AnchoisB 3394 AGTTTCGAATCGGGGGACGAAAGGGAGCTAAATCACTCGCTCCTTAACTCTATCCAGCCAACCTCTCAATATAACAAGCCT

 AnchoisA 3452 CTGATTTAATTATATATTTTAAAATTTGAT----AAAATAAATTATGGGTTTGGGTAATTCATTAATATTATATAAT
 AnchoisB 3474 TTCATTTTATTATAGTTT----TTGATTATAAAAAATAAATTATGGGTTT-GTGTGATTCATGAGTGATTATATAATA

 AnchoisA 3528 TATATATAATTTATATATATAA-AAATTTATAT----AATCCTGCAAAGCAGAAAGTCAAATGTATTGACTATA
 AnchoisB 3549 AAAATA-GATTTATATATAAAGAAATAATATCAGGAAAGTCTGAAGAAGTAGA---TGAAATGTATTGACTATA

CTG40749b
IES77
CTG23427
CTG35975
CTG21499
CTG40749
IES128
CTG28766
IES98
CTG10063
Anchoisa 1 TATAGTCTAAAATTATTGAAGATTCAAATTGCTTTGAGTTGCAAA---AATGA--CTTTTTTTGCTGAAGCAGAAAGAA

CTG40749b
IES77
CTG23427
CTG35975
CTG21499
CTG40749
IES128
CTG28766
IES98
CTG10063
Anchoisa 77 ACAAGA----AATAAATTAATATAGTACGAATAAGAATTTTAAATATTTTTTTCCCAATTTTGATTTCTCCCTAAATT

CTG40749b
IES77
CTG23427
CTG35975
CTG21499
CTG40749
IES128
CTG28766
IES98
CTG10063
Anchoisa 152 TGCATTAATATATTTCCCTGCTGTTAATTTGCTGTTATATTTAGTTTATAAATATTCAGATAATATAAAAAAATAAATTAG

CTG40749b
IES77
CTG23427
CTG35975
CTG21499
CTG40749
IES128
CTG28766
IES98
CTG10063
Anchoisa 232 TGCAATTTAATTTAGAAAAGT-TTTTCTAAGAGAATTTAATTAATAAAA-ATCTGCCTG---CAATTTATCG--TTT

CTG40749b
IES77
CTG23427
CTG35975
CTG21499
CTG40749
IES128
CTG28766
IES98
CTG10063
Anchoisa 306 TCAATATTATCATCAAATAAATGCTGAAAAGGTTTCCAGCTAATTTATAACTTATAAATATTGCTCAAC--TTCATTA

CTG40749b
IES77
CTG23427
CTG35975
CTG21499
CTG40749
IES128
CTG28766
IES98
CTG10063
Anchoisa 384 TTTGGACAATCGAATATCAAGCTTCATCAATTTGTTTGCCTTGAAC-AAATTTAGAAAAATATGGAAGAAGCTTTAAATA

CTG40749b
IES77
CTG23427
CTG35975
CTG21499
CTG40749
IES128
CTG28766
IES98
CTG10063
Anchoisa 463 TTGGAGGAGGGAAAAATCAAAGAAGTGAACAATAAATGCA-TTGAAAAGAAATTTTACAGAAGGGTTTGTAA-AAAATTTCC

CTG40749b -----
IES77 AA-TAGCACT-----AAAAT
CTG23427 -----
CTG35975 AA-TACAACATAAATCAAAAG-----AAAGTGCAC-TAAGAAATTCAAAAT-----AGCAACCAAAAT
CTG21499 AA-TAGCGCT-----
CTG40749 AA-TAGCACTAAATCAAAAATAAATCAAC-AAAGTGCACAAAAGAAATTCGAAATTAGATTTCAAGATTAGCGACCAAAAT
IES128 AA-TACAACATAAATCAAAAAGAAATAAAC-AAAGTGCAC-AAAGAAATTCGAAATTAGATATCAAAAATTAGTGAATCAAAAT
CTG28766 -----
IES98 AAATAGTGCTAAATCAGAAGAAATCAACAAAAGTGCAT-AAAGAAATTCAAAATTAGA-----GACCAAAAT
CTG10063 -----
Anchoisa 541 AA-TAGCACTAAATCAAAAAGAAATCAAC-AAAGTGCAC-AAAGAAATTCGAAATTAGATATCAAAAATTAGCGACCAAAAT

CTG40749b -----
IES77 TTTAGCAACAGCAAAATAAATATTTTAGAGAAAAAGGAATAGCAAGAAAGCAATTAGAAAGATAAACAATATGAAGAAAT
CTG23427 -----
CTG35975 TTTAAGCGACAACAATAAATATTTTAGAGAAAAAGGAAGAGTA-----
CTG21499 -----
CTG40749 TTTATGCAACAGCAAAATAAATATTTTAGATATAAAAAGAAATAGCAAGAAAGCAATAAGAAAGATAAACAACATTAAGAAAT
IES128 TTTAAGCAACAGCAAAATAAATATTTTAGAGAAAAAGGAATAGCAAGAAA-CAATTAGAAAGATAAACAATATGAAGAAA-
CTG28766 -----AGCAATTAGAAAGAT-TACAATATGAAGAAAT
IES98 TTTCAACGACAGCAAAATAAATATTTTAGAGAAAAAGGAAAGCAAAAAGCAATTAGAAAGATAAACAATATGAAGAAAT
CTG10063 -----
Anchoisa 618 TTTAAGCAACAGCAAAATAAATATTTTAGAGAAAAAGGAATAGCAAGAAAGCAATTAGAAAGATAAACAATATGAAGAAAT

CTG40749b -----
IES77 ATTTGTCAGAGTGCAAGCAAGAATTTGAGCAGAACATTTATTTAAGAAAAGTGAAGAGAGTGGTAGAGAAGTGGAGTGAT
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 ACTGTCAGAGAGCAAGCAAGAATTTGAGCAGAACATTTATTTAAGAAAAGTGAAGAGAGTAGTAGAGAAGTGGAGTGCT
IES128 ATTTGTCAGAGAA--GCAAGAATTTGAGCAGAACATTTATTTAAGAAAAGTGAAGAGAGTGGTAGAGAAGTGGAGTGCT
CTG28766 ATTTGTTAGAGAGCAAGCAAGTATTTGAGTAGAGTATTACTTTAAGAAAAGTGA-----GGAAGTGCT
IES98 ATTTGTTAGAGAAACAGCAAAATAAATTTGACAGAACATTTATTTAACAAGCAAAAGTGAAGAGAGT-GTAGAGAAGTGGAGTGCT
CTG10063 -----
Anchoisa 698 ATTTGTCAGAGAGCAAGCAAGAATTTGAGCAGAACATTTATTTAAGAAAAGTGAAGAGAGTGGTAGAGAAGTGGAGTGCT

CTG40749b -----
IES77 AAAGATATATTAAAGAGTTTATGAGG-----CGGCACCTTTGAGTTCATCATGAGGATTTGAATGAAA
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 AAAGATTTATAAAAGAGTTCATGAGGGAGCAGGATGGGTATCAGCACTTTTAGTTCATCATAAGAAATATGAATGAAGAA
IES128 AAAGATGTATAAAAAGGTTTCATGAGGGAGCAGGATGGGTATCGGCACCTTTGAGTTCATCATAAGGATTTGAATGAAGAT
CTG28766 AAAGATGTATAAAAGAGTATATGAGGGAGCTGGATGGGCTCTTTCAATTTGAGTTCATCATAAAAATTTGAATGAAGAA
IES98 AAAGATGTAT-AAAGATTTTCATGAGGGAGCAGGATGGGTATCGGCACCTTCGAATTCATCATAAGATTTGAATGAAGAA
CTG10063 -----
Anchoisa 778 AAAGATGTATAAAAGAGTTCATGAGGGAGCAGGATGGGTATCGGCACCTTTGAGTTCATCATAAGGATTTGAATGAAGAA

CTG40749b -----
IES77 GAGAAAAATCTTTGACTCGAGGAAGAAGAAAAAAGTGTGTAAGCAGAAATAGTAGCAGGATAAATA-----
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 GAGA-AAATGTTCTTTGACTCGAG--GAAGAAAAAGGTGCTGAAGCAGAAATAGTGGGAGGATGAAAAATGAGATACAAA
IES128 GAGAAAAAGCTCTTTGAACTCGAGAAAGAAAGAAAA-AGTGTGTAAGCAGAAACAGTAGCAGTATGAAAAATGAGATACCAT
CTG28766 GAGAGAAAGTCTTTAACTCTAGAAAAGGAAAAA-GGTGTGTAAGCAGAAATAGTAGCAGGATGAAAA-TGAGATACCAT
IES98 GAGATAAAGTCTTTGACTAGAGAAAAGAAAAATGATGTGTAAGCAGAAATAGTAGCAGGATGAAAAATGAGATACCAT
CTG10063 -----
Anchoisa 858 GAGAAAAAGTCTTTGACTCGAGAAAGAAGAAAAAAGGTGTGTAAGCAGAAATAGTAGCAGGATGAAAAATGAGATACCAT

CTG40749b -----
IES77 -----AATTTCTACTTC--TTTTTCATAAATAATCAATTTCTTC--TTTGAATTTGCTG
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 AACATATATATAAAA-ATGCATG-AATAATTTTCTACTTC--TTTTTCATAAGCAATCAATTTCTTTTGAATTTGCTG
IES128 AAAATATATAAAAA--TGCATG-AATAATATTAFACTTCTTTTTTCATAATAACAATTTCTTC--TTTGAATTTGCTG
CTG28766 ATAATATATAAAAAATATGCATGAAATAATTTTCTACTTA--TTTTTCATAATGATCAATTTCTTC--TTTGAATTTGCTG
IES98 AGAATATATAAAAA-ATGCATG-AATAATTTTCTACTTC--TTTTTCATAAATAATCAATTACTTC--TTTGAATTTCTG
CTG10063 -----
Anchoisa 938 AAAATATATAAAAA-ATGCATG-AATAATTTTCTACTTC--TTTTTCATAAATAATCAATTTCTTC--TTTGAATTTGCTG

CTG40749b -----
IES77 TCTCTATTCTATTTCTCTTAAATTCCTTAATTCATTTATTCTAATTTCTCAGTTAACTTTGATAATTTTAGCAAC--AT
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 TCTCTATTCTGCTCCTCTTAACTCCTTAATTCATTTCTCAATTTCTCAGTTAACTTTGATAATTTAGCACC--TT
IES128 TCTCTATTCTACTTCTCTTAAATTCCTTAATTCATTTCTAATTTCTCAGTTTACTTTGATAATTTAGCAAC--TT
CTG28766 TCTCTATTCTACTTCTCTTAAATTCCTTAATTCATTTCTAATTTCTTATTTAGTTAACTTTGATAATTTAGCAACCTTT
IES98 TCTCTATTCTACTCCTCCTTAAATTCCTTAATTCATTTCTAATTTCTCAGTTAACTTT-----
CTG10063 -----
Anchoisa 1013 TCTCTATTCTACTTCTCTTAAATTCCTTAATTCATTTCTAATTTCTCAGTTAACTTTGATAATTTTAGCAAC--TT

CTG40749b -----
IES77 TTTTGCTTAAATAAGTTCCTTGCGAGC-----TAAGCAGCATTTTATTTAAATATCTCAACTTACTCCTTTATTC
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 TTTTGCCTAAATGAG-----TTAGCTGCATTTTATTTAAATA-----GTTC
IES128 TTTTGCTTAAATGAGTTCCTTGCGAGCTGACTTTTTCTTAGCTGCATTTTATTTAAATATCTCAACTTACTCATTGTTC
CTG28766 TTTTGCTGAAACAAGTTCCTTGCGAGCTAACTTTTTCTTAGCTGCATTTTATTTAAATATACCCACTTACTCCTTTGTTC
IES98 -----TTCTTAGCTGCATTTTATTTAAATATATCAACTTACTCCTTTGTTC
CTG10063 -----
Anchoisa 1091 TTTTGCTTAAATGAGTTCCTTGCGAGCTAACTTTTTCTTAGCTGCATTTTATTTAAATATCTCAACTTACTCCTTTGTTC

CTG40749b -----
IES77 TGC-CAAATATCTTGGCCTTTTATTTCTCCGATAGAAGTGTCTAATTAGCGAATCAATCTTGTGTGATAAATATTTTA
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 TCGAAAAATATCTCAGCCTTTTATTTCTTTCGATCGAAGTGTTTAATTAGCGAATCAACCTTATGTTGATCAATATTTTA
IES128 TGCAAAAATATCTCAG-CTTTTATTTCTCCGATAGAAGTTCCTAATTGCGAATCAACCTTATATGATAAATATCTTA
CTG28766 TGCAAAAATATCTCAGCCTTCTATTTCTT-CGATAGAAGTGTTTAATTAGCGAATCAACCTTATGTTGATAAATATTTTA
IES98 TCGAAAAATATCTCAGCCTTCTATTTCTTCCGATAGAAGTGTCTAATTAGCGAATGAGAACTTATGTTAATAAATATTTTA
CTG10063 -----
Anchoisa 1171 TCGAAAAATATCTCAGCCTTTTATTTCTTCCGATAGAAGTGTCTAATTAGCGAATCAACCTTATGTTGATAAATATTTTA

CTG40749b -----
IES77 CATTAAATCATACTGCGTGAGATTTGATTAATCCTGC-CATTAGGGTTTGTAAATAAGGAGTGATTTGGTTCATTGTTT
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 CATTAAATCATCCAGCGTGAGATTTGA-TAATCTTGT-----AGGGTTTTTAAATAAA-AAFGATTTGGTTCATTGTTT
IES128 CATTAAATCATCTTTGTGAGATTTGATTAATCTCGACTTTACGGTTT-TAAATAAAGAATATTTGGTTCATTGTTT
CTG28766 CATTAAATCATCTATGTGAGATTTTATTAATCTTCACTTTAGGGTTTTTAAATAAAGAATATTTTGGATTCTATTGTTC
IES98 CATT-AAATCATCTGCGTGAGATTTGATTAATCCTGC-----
CTG10063 -----
Anchoisa 1251 CATTAAATCATCTGCGTGAGATTTGATTAATCTCGACTTTAGGGTTT-TAAATAAAGAATGATTTGGTTCATTGTTC

CTG40749b -----
IES77 TAAGAAATAAATACTGCCAATGTTTTATCAAGGTAGCTTTCCATCAGAAAAGCCAAGCTCTTAACAATAAATAATCTTTTT
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 TAAGAACGTTAACTGCCATGTTTTATCAAGATAA-TTCCATCAGAAAAG-CAAGCTCTTAACCATTAGCTTCGTTTT
IES128 TAAGAACATAAATACTGCCATGTTTTATCAGGGTAG-TTCCATCAGAAAAGCCAAGCTCTTAACCATTAGCTTCGTTTT
CTG28766 TAAGAACATAAATACTGCCATG-TTTAACAGGGTAG-TTCCATCAGAGAAGCCAAGCTCTTAATCATTAAGCTT-TTTTT
IES98 -----TCCTATTTGA--TTTTTTGACTCTAAGACAACGC
CTG10063 -----
Anchoisa 1330 TAAGAACATAAATACTGCCATGTTTTATCAGGGTAG-TTCCATCAGAAAAGCCAAGCTCTTAACCATTAGCTTCTTTT

CTG40749b -----
IES77 ATTTTCATGTAATAATTTCTTATTTGGTAGCTGATCTCAGCAGTTATCCTATTTGAACTTTTTTTGATTCTAAGCCAAGT
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 AATTTTCATATAAATAATTTCTTTTAGTAG-TGATCTCAGAAAGTCAATTTTCTCTTTTTTTGATTCAAGCCAAA
IES128 AATTTTCATGTAATAATTTCTTTT-GTATCTGATCTCAGCAGTTATCCTATTTCAACTTTTTTTGATTCTAAGCCAAGC
CTG28766 AATTTTCATGTAATAATTTCTTTTATTTGGCTGAGCTCAACAGTTATCCTATTTAACTTTTTTTCT-CTCTAAGCCAAGC
IES98 -----TCCTATTTGA--TTTTTTGACTCTAAGACAACGC
CTG10063 -----
Anchoisa 1409 AATTTTCATGTAATAATTTCTTTTAGTAGCTGATCTCAGCAGTTATCCTATTTGAACTTTTTTTGATTCTAAGCCAAGC

CTG40749b -----
IES77 ATGATTTAGTATCAACTTTGAGCAAATAATACGCTGTCACACCTTAAGAATGAATTGCAGGTAAATACTAACCTGCCAAG
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 ATT-----TTTTGAGCAAATATTAAGCTGTACACCTGAGGAATGAATTGGGTAATAAATATCATACGAAG
IES128 ATT--TTAGTAGCAACTTTGAGCAAATATACGCTTTTACACTCTGAAGAATGAATTGCAGGTAAATAAATATCCTGCC-AG
CTG28766 ATTATTAATAGCAACTTTGAGCAAATATAC-CTTTTACACCTGAAGGATGAATTGCATTAGAGTAATATCCTTTCAAG
IES98 ATT-TTTAGTAGCAACTTTGATCAAAAGATTACGCTGTACACCTGAAGAAATAA-----TATCCCCTGCCAAG
CTG10063 -----
Anchoisa 1489 ATTATTTAGTAGCAACTTTGAGCAAATATACGCTGTACACCTGAAGAATGAATTGCAGGTAAATAAATATCCTGCCAAG

CTG40749b -----
IES77 ATTAAGCCAAGTACATGGATTCAACAATAACAGTTGCTTGTATTAGCTTAG-AAATGGAAATCATGATG-AATTTTGGAA
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 ATTAAGCCATGTACATAGATTTAACAGAACCAATCACTTGTATTAGTTTACAAAATGGAAATCATGATG-AATTTGAAA
IES128 ATTAACCAATAGTACATAGATTTAACAGAACCAGTTGTTGATTAGCTTAGAAAACGGAAATCAAGATG-AATTTGAAA
CTG28766 ACTAAGCTATAATACATAAATCAAGGAACAGTTGAATGATTAGC-----AAATGGAAATCATGATGAAATTTCAATA
IES98 ATTAAGCCA-----
CTG10063 -----
Anchoisa 1569 ATTAAGCCATAGTACATAGATTTAACAGAACCAGTTGCTTGTATTAGCTTAGAAAATGGAAATCATGATG-AATTTGAAA

CTG40749b -----
IES77 GCA T G T T T A A T T A T T C A A A C A A C G C G A T A G T A A A T T T T T A T T G A - A A A A T A A G T T C T T T T T T A A C C A A T C A A T T T G A A A G
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 G T T T G T T T A A G T A C T T G A A C A A T G T G A T A G T A A A T T T T T A T T G A - A A A A A T A T T C T G T T T T A A C C A A T C A A T T T C A A A G
IES128 G T T T G T T T A A T T A T T A A A A C A A T G C G A T A G T A A A T T T T T A T T G A A A A A A A A A T C T T T T T T T A C C A A T C A A T T T C A A A G
CTG28766 G T T T G T T T A A T T A T T C A A A C A A T G C A A T A -----
IES98 -----
CTG10063 -----
Anchoisa 1648 G T T T G T T T A A T T A T T C A A A C A A T G C G A T A G T A A A T T T T T A T T G A - A A A A A A A T T C T T T T T T A A C C A A T C A A T T T C A A A G

CTG40749b -----
IES77 C - A A T T G A T T T T - T A A A G C A G A A A A C A A T T T A G A A T A A A T T A A A G A A A A A T A C T T A A A T G A T T T A T A A T T T - A A T A C A A A
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 C - A A T T G A T T T T A A A A A G C A G A A A C A A T T T A G A A T A A A T T A A G A A A A A T T A - T T A A A T G A T T A A T A A T T
IES128 C A A A T T A A T T T T - A A A A G C A G A A A A C A A T T T A G A A T A A A T T A A A G A A A A A T A - A T A A A T G A T T T A T A A T T T T A A T G C A A C
CTG28766 -----
IES98 -----
CTG10063 -----
Anchoisa 1727 C - A A T T G A T T T T - A A A A G C A G A A A A C A A T T T A G A A T A A A T T A A A G A A A A A T A - T T A A A T G A T T T A T A A T T T T A A T G C A A C

CTG40749b -----
IES77 T T A A A T A C T G C T T T T T A T T G A T T A T A T T T A T A G T G A G A A T T T T - - - T T T T G A A T T A A A G T A A A A T A T T T T G A T T A A A T
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 -----
IES128 T T A - - - - - - - - - - T T T T A T T G A A T T A T A T T T A T A A T G A G G A T T T T T G T T T G A A T T G G A G - A A A A T A T T T T G A T T C A A T
CTG28766 -----
IES98 -----
CTG10063 -----
Anchoisa 1804 T T A A A T A C T G C T T T T T A T T G A A T T A T A T T T A T A A T G A G G A T T T T T G T T T G A A T T G G A G - A A A A T A T T T T G A T T C A A T

CTG40749b -----
IES77 T T T - - - - - - - - - - T T T T T A T T G G C G C T C A A A T T T T A T G C C A G A A A T T T A A T T T T T C C A C A T T T A A T G T A A A T A
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 -----
IES128 T T T G A T T A T T G A T T C G A A T T T T A G A T T A T A G C T C C A A T T T T A T G C A A G A A A T T T A A T T T T C C A C A T T T A A T G T A A A T A
CTG28766 -----
IES98 -----
CTG10063 -----
Anchoisa 1883 T T T G A T T A T T G A T T C G A A T T T T A G A T T A T A G C T C C A A T T T T A T G C A A G A A A T T T A A T T T T T C C A C A T T T A A T G T A A A T A

CTG40749b -----
IES77 G A A A C T C A G C T T C T C A T T A G T G T A C A T A T A T T A T T T G C T A T A G C A G G C C T T A T G C T T A A A T A A C A A T A T T T A T A C A C A
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 -----
IES128 G A A A C T C A A G C T T C T C A T C T G T A C A T A T A T T A T T T G C T A T A G C A G G C C A T A T A C C T A A A C A C A A T A T G A A G A C A C A
CTG28766 -----
IES98 -----
CTG10063 -----
Anchoisa 1963 G A A A C T C A A G C T T C T C A T C T G T A C A T A T A T T A T T T G C T A T A G C A G G C C A T A T G C T T A A A C A C A A T A T G T A G A C A C A

CTG40749b -----
IES77 T A T G C G A T G A T C A T T G C T A A T A A T T T - A C T A A A C C T A T G T T T A T G A A A A A A A A T T T T A A T C A A A C C A A A T A G C A A A T G
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 -----
IES128 T T T G C A A T G A T C A T T G C T A A T A A T T T T A C T A A A C C T A T G T T T C T G A A A A A A G A C T T T T A A T C A A A C C A A A T A G C A A A T G
CTG28766 -----
IES98 -----
CTG10063 -----
Anchoisa 2043 T A T G C G A T G A T C A T T G C T A A T A A T T T T A C T A A A C C T A T A C T T A T G A A A A A A G A C T T T T A A T C A A A C C A A A T A G C A A A T G
T A T G C G A T G A T C A T T G C T A A T A A T T T T A C T A A A C C T A T G T T T A T G A A A A A A G A C T T T T A A T C A A A C C A A A T A G C A A A T G

CTG40749b -----
IES77 C T G G A A T T G T T T A C T C T A G A G G A T G C T C A T A A A A T T A T A A A C A A A A - T T A G A T T C C A G A A G G A A G T A A A G T T G A G A A A
CTG23427 -----
CTG35975 -----
CTG21499 -----
CTG40749 -----
IES128 C T A G A A C T G C T T A C T T T A A A G G A T G C T A T A A A A T T A T A A A C A A A A G - - T A G A A T C C A C A A G G G A A G T A A A A T T G A G A A A
CTG28766 -----
IES98 -----
CTG10063 -----
Anchoisa 2123 T T G G A A C T G C T T A C T C T A G G T G A T G C T C A T A A A A T T A T A A A C A A A A A T T A G A A T C C A C A A G G G A A G T A A A G T T T A G A A A
C T G G A A C T G C T T A C T C T A G A G G A T G C T C A T A A A A T T A T A A A C A A A A A T T A G A A T C C A C A A G G G A A G T A A A G T T G A G A A A

CTG40749b -----
 IES77 AAATATGAACAAATTTGAGAAAAAAGCAACTTCAATCATTAACCTTAAAAAATTTGCGAAAA----TTGC-TTAGA
 CTG23427 -----
 CTG35975 -----
 CTG21499 -----CAAATCAATCATTAACCTTAAAA----TTGCAGAAAAATAATGATTAGAA
 CTG40749 -----
 IES128 AAA-ATAAA-AAATTTGAGAAAAA-AGCAACTTCGAATCATTAATTTAAAA----TTATAGAAAA----TTGCTTTAGA
 CTG28766 -----
 IES98 -----
 CTG10063 AAA-----AGCAATTTCAATCATTAACCTTAAAA----TTGCAGAAAA----TATCTTTAGA
Anchoisa 2203 AAATATAAACAAATTTGAGAAAAAAGCAACTTCAATCATTAACCTTAAAA----TTGCAGAAAA----TTGCTTTAGA

CTG40749b -----
 IES77 ATTAGGAAATTCGGTAAAACCTGCAA--TTTGGCA-GGATATTTAGGAATTTCTCTGGAAATAGCTAAGGATTATATA
 CTG23427 -----
 CTG35975 -----
 CTG21499 ACTAGAAAAATTCGGTAAAACCTGCAA--TTTGGCA-GGATATTTAGGAATTTCTATTGGAAGAATAATTTATTGAGAA
 CTG40749 -----
 IES128 ATCAGGAAATTTGTAAAACCTGCAA--TTTGGCAAGGATATTTAGGAATTTCTATTATGAGAGCTAAATATTTATAA
 CTG28766 -----
 IES98 -----
 CTG10063 ATGAGGAAATTCGGTAAAACCTGCAA--TTTGGCA-GGATATTTAGGAATTTCTATTATGAGAGCTAAATATTTATAA
Anchoisa 2275 ATTAGGAAATTCGGTAAAACCTGCAA--TTTGGCA-GGATATTTAGGAATTTCTATTGGAAGAGCTAAATATTTATAA

CTG40749b -----
 IES77 ATGTATGTTTTACAGCAACCTAATATTTACAAAGACAATAACTTGCTTT----ATTGATGCATAACAATAATTTTGATT
 CTG23427 -----
 CTG35975 -----
 CTG21499 AATGATGTT-TACA-CAACCTG--ATTTACAAGGACAATAACTTGCTTTTACATTTGATGCTTAACATAAATTTAGGA-T
 CTG40749 -----
 IES128 AAGTATGTT-TACAGCAAGCTG--ATTAACAAGACAATAACTTGCTTTTAAATTTGATGCATAACATAAAATGTGGATT
 CTG28766 -----
 IES98 -----
 CTG10063 -----
Anchoisa 2351 AAGTATGTTTTACAGCAACCTG--ATTTACAAGACAATAACTTGCTTTTAAATTTGATGCATAACATAAATTTGGATT

CTG40749b -----
 IES77 T--AAATTCGTAGCTCAAGTAAATTTGCTCGCTTAGGCAGTGAAAAATAATCTATTAATAAATTTAGAGCAAAATTTTCA
 CTG23427 -----
 CTG35975 -----
 CTG21499 TAAAAATTTGTATCTAAAGATAATGTTACTC--TTGAGCAGTGCAAAAATAATCTATTAAGAA-TTGTAGCAAAATTTTCA
 CTG40749 -----
 IES128 TAAAAATTTGTAGCTCAAGAAAATATTGCTCTTTTGGAGCAGTGCAAAAATAATCTATTAAGAAATTTATAGCAAAATTTTCA
 CTG28766 -----
 IES98 -----
 CTG10063 -----
Anchoisa 2429 TAAAAATTTGTAGCTCAAGAAAATGTTGCTCGCTTAGGCAGTGCAAAAATAATCTATTAAGAAATTTATAGCAAAATTTTCA

CTG40749b -----
 IES77 TATTTGCAACTAGCTACCGCAG-TTCATTAATTTTTTTTAGTAGTTTAACTACTTTGGCTTTGTACCTATCGCTTATTTA
 CTG23427 -----
 CTG35975 -----
 CTG21499 TATTTGCAAAATAGCAACAGCAGTTTCATTAATTTTTTAGATAATTTAACAGCTTTGGTTATATACATGTCGCTTATTTA
 CTG40749 -----
 IES128 TATTTGCAAAATAGCAACTGCAGTTTCATTAATTTTTTAAAGTAGTTTAAACAGCTTTGGTTCATATACCTATCGATTATTTT
 CTG28766 -----
 IES98 -----
 CTG10063 -----
Anchoisa 2509 TATTTGCAAAATAGCAACTGCAGTTTCATTAATTTTTTAAAGTAGTTTAAACAGCTTTGGTTATATACCTATCGCTTATTTA

CTG40749b -----
 IES77 GTTGCCTTAATTTTAAATCTCAAAATTAATGTTCTTTAGACAGAGGTTTGAATTTGC-ATACAATTAGCTACTCTTTTA
 CTG23427 -----
 CTG35975 -----
 CTG21499 GTTGCCTTAATTTTAAATCTCAAAATTAATGTTCTTTAGACAGAAGGTTTGAATTTGCAAAATAATTAGCTACTCTTTTA
 CTG40749 -----
 IES128 GTTGCCTTAA-TTTAAGTCTCAAACTAAATGTTCTTTAGACAGAAGGTTTGAATTTTGC-AAATAATTAGCTACTCTTTTA
 CTG28766 -----
 IES98 -----
 CTG10063 -----
Anchoisa 2589 GTTGCCTTAATTTTAAATCTCAAACTAAATGTTCTTTAGACAGAAGGTTTGAATTTGCAAAATAATTAGCTACTCTTTTA

CTG40749b -----
 IES77 AATTCAAGATAAAAAATGTTTACATTAATGAGTGAGTTTGGAGACATTTATTAGTTGCAAGAGGTTGTTAAATAAAA
 CTG23427 -----
 CTG35975 -----
 CTG21499 ATTC--AATTAATAAATTTGTTTACATTTAGTAGTGAG-TTTGGGAGATTTTAAAAATTGCAAAAGGTTAGTAAAAAAA
 CTG40749 -----
 IES128 AATTAAAAATAAAAAATTTGTTTACATTTGCTGAGTGCGCTTTTGGGAGAAATTTAAAAGTTGCAAGAGGTTGGTAAAAAAA
 CTG28766 AATTCAAAAATAAAAAATTTGCTTACATTTGATAAGTGAGTTTGGCAGAAATTTA-AAGTTGCAAGAGGTTGGTAAAAAAT
 IES98 -----
 CTG10063 -----
Anchoisa 2669 AATTCAAAAATAAAAAATTTGTTTACATTTAGTAGTGAGTTTGGGAGAAATTTAAAAGTTGCAAGAGGTTGGTAAAAAAA

CTG40749b -----TTGCAAATTAATCAAGCTCATCAAAAAATAAATGTGTTATTGGAGCTATACTTTGTGACGTGT
IES77 GAACACTTTTCCATATTGCAAATTAATCAAGCTCATCAAAAAATAAATGTGTTATTGGAGCCATAGCTTTGTGACTGGT
CTG23427 -----
CTG35975 -----
CTG21499 -AACACGTTTCCATAATTGCAAATTAATCAAGCTCATCAAAAAATAAATAATTATTGGAGCTATAGCTTTGTAAGGGT
CTG40749 -----
IES128 GGGCACTTT-CCATTTTGCAAATTAATCAAGCTCATC-AAAAATCAATAATTGTTATTGGAGCTATAGCTTTGTGACGGGT
CTG28766 GA-CGCTTTTCCATATTGCAAATTAATCAAGCTCATC-AAAAATAAATTTGTTATAGAAGACTATAGCTTTGTATAGGT
IES98 -----
CTG10063 -----
Anchoisa 2749 GAACACTTTTCCATATTGCAAATTAATCAAGCTCATCAAAAAATAAATGTGTTATTGGAGCTATAGCTTTGTGACGGGT

CTG40749b TTATATGCTTAT-AATGTGTATAGGAAATGTT-ATCAATAGGTTTTGGGAGAATTTTT-GAATGAACCTCTAAGGCTGCT
IES77 TTATATGCTTACAAATGTTATATAGGAAATGTTTATCAATAGGTTTTAGAGAATTTTT-GAATGAACCTCTAAGGCTCCT
CTG23427 -----
CTG35975 -----
CTG21499 TTATAGCTTAAAAATGTTATAGG-AATGTTAATCAATAGGATTTTGGAGAATAATTT-TAATGAACCTTTAAGGCTGCT
CTG40749 -----
IES128 TTAATACTTACAAATGTTATAGGAAATGTTAATCAATAGGTTTTGGGAGAATTTTTGAATGAACCTCTAA-GCTGCT
CTG28766 TTATATGCTTGCAAATGTG-----AATTTAATCGATAGGTTTTGGGAGAATTTTT-GAATGAACCTCTAAAGCTGAT
IES98 -----
CTG10063 -----
Anchoisa 2829 TTATATGCTTACAAATGTTATAGGAAATGTTAATCAATAGGTTTTGGGAGAATTTTT-GAATGAACCTCTAAGGCTGCT

CTG40749b TTAGCAGAATAGTGAAGAAAAATAATTTTGCT-GGTGCTGGACAATGTATTTATCCATCACACATTAAT-AAAAATTTGGAT
IES77 TTAGCAGAATAGTGAAGAAAAATAATTTTCTTTGTCTCGGAAATGCATCTATCCATCGCATCTC---AAAAATTAATGAT
CTG23427 -----
CTG35975 -----
CTG21499 TTAGCAGAATAGTGAAGAAAAATAATTTTGCTCGGTGCTGGACGATGCATCTATTCATCGCACATCGC-AAAAATTTGGAT
CTG40749 -----
IES128 TTAGCAGAATAGTGAAGAAAAATAATTTTGCTGGTGGTGGACGATGCATATATCCATCGCACATCAC-AAAAATTTGGAT
CTG28766 TTAATGAGAATAGTGAAGAAAAATAATTTTACTTTTGTGCTGGACAATGCATCTATCCATCTTACATCACAAAAATTTGGAT
IES98 -----
CTG10063 -----
Anchoisa 2908 TTAGCAGAATAGTGAAGAAAAATAATTTTGCTGGTGGTGGACGATGCATCTATCCATCGCACATCAC-AAAAATTTGGAT

CTG40749b TAATFGCTTATGTGAACCTATCTATTTCTCCACAAATATAGTCCCTGA-GCTTAATTCATTGAAA-GCTCTGGGGAGT-
IES77 TAATFGCTTATATGAATTTATTTCTCCCACCATATAGTCCCTT-GCTTAATTCATTGAAAAGCTATGGGG-AGTA
CTG23427 -----
CTG35975 TAATFGCTTATGTGAACCTGTTATTTCTCCATCATATAGTCCCTAGGCTTAATTCATTAAAAAGCTATGGGG-AGTA
CTG21499 -----
CTG40749 TAATAGTCTTATGTGGACTATTTATTTTCCCACCATATAGTCCCTTA-GCTTAATTCATTGAAAAGCTATGGGG-AGTA
IES128 TAATFGTATATGTGAACCTATTTCTCCCACCATATAGTCCCTTA-GATTAATTCATTGAAAAGTTATGGGG-AAAA
CTG28766 -----
IES98 -----
CTG10063 -----
Anchoisa 2987 TAATFGCTTATGTGAACCTATTTATTTCTCCCACCATATAGTCCCTTA-GCTTAATTCATTGAAAAGCTATGGGG-AGTA

CTG40749b -----ACATCGTAACAACATATTAAGAATTTCAACAACATTA-----
IES77 GCAAAACAAAACTCTCCAAAATGACTTTCGCAACATCATTTTAAGAACTTCAACAATATTCATTTTGTGCTTAACTCAAT
CTG23427 -----CAACTTTCATTAATTTCTTAAACCAAT
CTG35975 -----
CTG21499 AC-AAACAAAAGCTCTCCAAAATGCACCTTCAACAATAACATTTTAAGAATTTGCAAAATTCGTTTTGTTTAACTAAAT
CTG40749 -----
IES128 GCAAAACAAAAGCTCTCCAAAATGCACCTTCGCAACAACATTTTAAGAATTTCAACAATTCATTTTGTGCTTAACTCAAT
CTG28766 GCAAAATAAAAGCTATCTAAAATACACTTCGCAACAACATTTTAAGAATTTCAACAATATGCATTTTGTGCTTAACTCAAT
IES98 -----
CTG10063 -----
Anchoisa 3065 GCAAAACAAAAGCTCTCCAAAATGCACCTTCGCAACAACATTTTAAGAATTTCAACAATTCATTTTGTGCTTAACTCAAT

CTG40749b -----TACATAGGCAGCCTTTTTGAT
IES77 TACAGCTAATTAAGTGCAAAATATTTGCACCTTAACTTGAATTTCTTGAAGCTTACTTACATAGACAGCAGTTTTGAT
CTG23427 TGCAACAATTAAGTGCAAAATATTTCCACTTTTAGCTTGAATTTCTTGAAGCAATGCTTGCATAGACAAAAGTTTTGAT
CTG35975 -----TA-ATCGACACAGTTTTTAT
CTG21499 TACAGCTAATTAAGGGCAAAATATTTGCACCTTAACTTGAATTTCTTGAAGCTTGTCTTACATAGACAGCAG-TTTGAT
CTG40749 -----
IES128 TACAGCTAATTAAGTGCAAAATATTTGCACATTTAACTTGAATTTCTTGAAGCTTGTCTTGCATAGACAAATAGTTTTGAT
CTG28766 TACAGCTAATTAAGTGCAAAATATTTGCATCTTAACTTGAATTTCCGAATGCTTGTCTTACGTAACAGCAGTTTTTAT
IES98 -----
CTG10063 -----
Anchoisa 3145 TACAGCTAATTAAGTGCAAAATATTTGCACCTTAACTTGAATTTCTTGAAGCTTGTCTTACATAGACAGCAGTTTTGAT

CTG40749b TAATTATATTTTCATTTAAAACATAAGGTATTCAATGCAACAATTTACAATAAAAA-TCTCTCACTTTTGTATA--GT
IES77 TAGTTATATTTTAAATTTGA
CTG23427 GAATTATATTTTCATTTAAACATAAAATATTTCAATAAAAGCAATTAACAATAAAAA-TCTCTACACTTTTCTTATA-GC
CTG35975 TAATTATATTTTCGTTTAAA
CTG21499 GAATTATATTTTCATTTAAACATAAAACATTTCAATGCAAGCAATTAACAATAAAAAATCTTTACTCTTTTCTGTAAGGC
CTG40749 -----
IES128 TAATTATATTTTCATTTAA
CTG28766 TAATTATATTTTCATTTA-----AAATATTTCAATGCAATTAACAATAAAAAATTTCCACTATTTTCTTTTC-GA
IES98 -----
CTG10063 -----
Anchoisa 3225 TAATTATATTTTCATTTAAACATAAAATATTTCAATGCAAGCAATTAACAATAAAAAATTTCTACTCTTTTCTTATA-GC

CTG40749b GACCGTGTGCGAAAAGCAGACTTTCGTCAGCTATACTTAACTACTATCGAGCGGATAG---TAAGAG-AGAGTTTGAATCG
 IES77 -----
 CTG23427 GATCGTGTGCTAAAGCAGACTTTCGTCAGTTATACTTAACTATCGAGAGA-----GTTTCGAAT-G
 CTG35975 -----
 CTG21499 GACAATTGTGCAATAGCAGACTTTCGTCAGTTATACTTAACTATCGAGCAGATATTAATAAGAGCACAGTTTCGTATCG
 CTG40749 -----
 IES128 -----
 CTG28766 AACAGAGTGCAAAAGCAGACTT-----GTCAAGACTTAACTATCGAGCAGATATTAATCAGAGTAGAGTTTCGAATCT
 IES98 -----
 CTG10063 -----
Anchoisa 3304 GACAGTGTGCAAAAAGCAGACTTTCGTCAGTTATACTTAACTATCGAGCAGATATTAATAAGAGCAGAGTTTCGAATCG

CTG40749b GGGGACAGAAATGGGATC AAAACAATCGCTCCTTAACTTTCCAGCCTATTCTCAATACTATTAGACTCTGATTTAATTA
 IES77 -----CTCCTTAACTTTCCAGCCTATTCTCAATACTATTAGACTCTAATTTAATTA
 CTG23427 GGGGACAGGATGGGATTTAAAACACTCGCTCCTTAACTTTCCAGCCTATTCTCAATACTATTTAAGCTCTGATTTAATAT
 CTG35975 -----
 CTG21499 G-----GCCTATTCTCAATACTATTAGACTCTGTTTAAATTA
 CTG40749 -----
 IES128 -----GACCTTTCCAGCCTATTCTCAATACTATTAGACTTTGATTTAATTA
 CTG28766 AGGTACAGGTGGGATCTACAACACTTGCTCCTTAACTTTCCAGCCTATTCTCAATACTATTAGACTCTGATTTAATTT
 IES98 -----
 CTG10063 -----
Anchoisa 3384 GGGGACAGGATGGGATCTAAAACACTCGCTCCTTAACTTTCCAGCCTATTCTCAATACTATTAGACTCTGATTTAATTA

CTG40749b TATATTTTAAATTTATGATAAAATTAATTTCTGAGTTTGGTGTAACTCATTAAATTTTATACAACCATATATGATTTATA
 IES77 TATATTTTAAATTT-CATAAAATTAATTTATGGTTTGGGGTAACTCATTAAATATTTGATCATTATATATAATTTATA
 CTG23427 TATATTTTAAAGTT-TGATAAAATTAATA-ATGGGTTTGGGGTAACTCATTAAAT-----ATGTATAATTTAT-
 CTG35975 -----
 CTG21499 TATATTT-AAAATTT-TGATAAAATTAATTTATAGGTTTGGGGTAAATTTGATTGAATATATATAATTTATTTATAATTTATA
 CTG40749 -----
 IES128 TATATTTTAAATTT-TGATAAAATTAATTTATGGGTTTGGGGTAAATTCATTAAATATGATATAATTTATATAATTTATA
 CTG28766 GACATTTTAAATTT-TGATAAAATTAATACTATGGGTTTGGGGTAAATTCATTAAATATTTATATAATTCATATATAATTTATA
 IES98 -----
 CTG10063 -----
Anchoisa 3464 TATATTTTAAATTT-TGATAAAATTAATTTATGGGTTTGGGGTAAATTCATTAAATATTTATATAATTTATATAATTTATA

CTG40749b TTGTTATAAA-TTTATTTAATCCTGCAAAAGCAGAAAGTCAAATTTGATTTGATTATA
 IES77 TTATTATAAA-TGTATATACTCCTGCAAAAGTCAGAAAGTC-----
 CTG23427 -----
 CTG35975 -----
 CTG21499 TTATTTTAAATTTTATATAATCCTGCAATAAGCAGAAAGTCAAATTTGATTTGACTATA
 CTG40749 -----
 IES128 TTATTATAAA-TTTATATAATCCTGCAAAAGCAGAAAGTCAAATTTGATTTTACTATA
 CTG28766 TTATTATAATTT-----
 IES98 -----
 CTG10063 -----
Anchoisa 3543 TTATTATAAA-TTTATATAATCCTGCAAAAGCAGAAAGTCAAATTTGATTTGACTATA

D CTG36069 TATAGTC--TAAAAAATTCAGCCAAAGTTTACTTTGAGTTGTAGCTAA--TCAATTTTATTTTGCTA-T----AA-AC
 IES85 TATAGTCA-AGAACAATTTAGCCCAACATTTACTTTGAGTT---ACAAAATTCATTTTATTTT-CTA-TGCAAAA-GC
 IES57 TATAGTCGAAAAACAATTTAGCCCAACATTTACTTTTAGAT--TCAAAATTCAA-TTTATTTTGCTA-TTGCAAAAAGC
 IES214 TATAGTCG-AAAACAATTTAGCCCAACAGTTACTTTGAGTT---GCAAAAATTCATTTTATTTTGCT-T-CACATAAA-GC
 IES105 TATAGTCG-AAAACAATTTAGCCCAATTTACTTTGAGTT---GCAAAATTCATTTTATTTTGCT-TTGCTTAA-GC
 IES47 TATAGTC--AAAAAATTTAGCCCAACATTTACTTTGAGTT---GCAAAATTTAATTTTATTT--CTAATTCGAAAA-GC
 IES80 TATAGTCG-AAAACATTTTCAACCAACATTTACTTTGAGTT---CCAAAATTCATTTTATTTTGATA-TAACAAAA-AC
 CTG4797 -----
 IES77b TATAGTAG-AAAAAATTTAGCCCAACATTTACTTTGAGTT---GCAAAAGTCAATTTTATTTTGCTA-TTGCAAAA-AC
 CTG826 -----
 IES132 TATAGCCG-AAAA-AATTTAGCCCAACATTTACTTTGAGTT---GCAAAAATTCATTTTATTTTGCTA-TCTCAAAA-GC
 CTG7743 -----
 CTG43276 AACATTC-AAAAAATTTAGTCAACATTTACTTTGAGTT---GAAAATTTGGAATTTTATTTTACTA-TTGCAAAA-GC
 IES42b TATAGTTG-AAAAAATTTAGCCCAAAATTTACTTTGAGAT--GAAAATTTGAATTTTATTTTGCTA-TGCAAAA-AC
 IES35 TATAGTCG-AAAAAACTTGAGCCCAACATTTAATTTGGGT---CCAAAATTAATTTTAAATTTGTTA-TTGCAAAA-GG
 IES104 TATAGTCG-AAATCAATTTAGCCCAACATTTACTTTGAGTT---GCAAAAATAC-----
 IES76 -----
 CTG13940 -----
 IES42 TATAGTAG-AAAACAATTTAGGCAACATTTACTTTGAAAT---GCAAAAGTTCATTTTATTTTCTA-TTACTAAA-TC
 CTG34100 -----
 IES169 TATAGTCG-AAAACAATTTCTGCAACATTTGGTTTAAT---GCAAAAATTCATTTTAA-TCTGCTA-TCACAAAA-GT
 IES103 TATAGTCG-AAAACAATTTAGCCCAACATTTACTTTGGGT---GCAAAAATTCATTTTATTTTGCTA-TTGCAAAA-GC
 CTG2630 -----
 CTG45590 TATAGTCG-AAAAAATTTAGCCCAACATTTACTTTGAAAT---GCAAAAATTCATTTTATTTTCTA-TGCAAAA-GC
AnchoisB 1 TATAGTCG-AAAACAATTTAGCCCAACATTTACTTTGAGTT---GCAAAAATTCATTTTATTTTGCTA-TTGCAAAA-GC

CTG36069 AAAGT-ATAATTGAACCAA-GTTG--TTTA-----TGTTAAAAAAAT-----TATAATAATCTTTTATAA
 IES85 CAAGT-AAAAGTATTAACCAA--TTGA-TTTATAA-GCA--TTTGAAAAAA--TTGTT--TAATGATTTTCTTATAA
 IES57 TAAGT-AAA-----TTTGAAAGAAATTTAAT--TTATTTTCT-ATAA
 IES214 TATGT---AAATTAACCAAAGTTTA-TTTA-----TTAAAGGT---TTTTG-TAGAAATTTTATTTAA
 IES105 TAAFA-AGAAATTTGAACCAA-GTTTA-TTTAAAA-GCAAGTTTGAATAATC-----TTTTTAAATAATTTCTTTTAA
 IES47 TAAGT-AAAATTGAACCAA-----
 IES80 CAA-----TGAACCAAGGTTAA-TTTAAAA-GTAGATTTGAAGAAAATTTTTTTGTATAATAATTTTCTTTAA
 CTG4797 -----
 IES77b CAAGT-AAAAATTCACCAA-GTTTA--CTAAAA-GTAGTTTGAAGGAAA---TTTTTGATGCTAATTTTCTT-TAA
 CTG826 -----
 IES132 GAAGT-AAAA-TTGAACCC-GTTAA-TTTGAA-GCAGTTTGAAGGAA-----TATAGTCATTTTCTTATAA
 CTG7743 -----
 CTG43276 AAAGA-AAAAATGTCCAA-GTTTA-TTTAAAA-GCAGATTTGAAGGAAA---TTCTTAATCATAATCTTCTCATAA
 IES42b CAAGT-AAAAATTCACCAA-GTTT-----GAAGGAAA---TTTTTGATAGTAAT-TTCTTATAA
 IES35 CAAATAAAAAATTTGAACCAA-ATTTA-TTTAAAA-GCAGTTTGAAGAAC--ATCATTATAATATTTTTC-----A
 IES104 -----
 IES76 -----
 CTG13940 -----
 IES42 CAAGT-AAAAATTTGAACCAA-GTTAA-TTTAAAA-GCAGTTTGAAGGAAA---TTTTTGATAATAATTTTCTTATGA
 CTG34100 -----
 IES169 TAAGT-AAAAATTTGAACCAA-GTTTA-TCTAAAA-GCAGTTT-AAGGAAA---TTTTTGATAATAATTTTCTTATAA
 IES103 CCAGT-AAAAATCCACCAA-GTTTAAATTTAAAAAGCAGTTTGAAGGAAA---TTTTTGATAATAATCTTTATTATAA
 CTG2630 -----
 CTG45590 CAAAT-ATAAT-----
AnchoisB 75 CAAGT-AAAAATTTGAACCAA-GTTTA-TTTAAAA-GCAGTTTGAAGGAAA---TTTTTGATAATAATTTTCTTATAA

CTG36069 ATAAATTAACCTCTAAATTTTTTGTTCGCTATTATAT--TTGCAATA-T--AATTAATTTGCGCATATATAATA--
 IES85 ATATTTTAAATTTCTAATA-TTTTTTACACTTTT-TATCTATTGCTAATGGT--AGTATAT-TTGATCATATGATA--
 IES57 ATAAATTAACCTCAAGCTTTTT-ATGGAATATT-TATAAA--GCTTGTAT--AATATATATGAATTATATAAACAT
 IES214 T--ATTTCAAAACAGCATATTTTAGCTTTTT-TATATATTGCTTCTGTT--AGTAT-----
 IES105 ATAAATTAACCTAGTATTTTTTGTGCACTTTTACATTTTCTTGTAAAT-----
 IES47 TGAATTAATTAATATATTT-----
 IES80 TTATTTTATCTTCTCGTATTTTTTGTGCACTTTAATATATATTACTAATAAT--AATATAATTTACATTATATGATAT
 CTG4797 -----
 IES77b TTAATTTAACTCCTTGTATTTTTTGTGCTCCTTAATATATATTGCT-ATTAT--AATATATGTTGCATGATATATATAT
 CTG826 -----
 IES132 ATAAATTAACCTTTAGTATTTTTTGTGCACTTTTTTAT-TATTGCTTAGAACAAAATATATTTTGCATTATCTGATATAT
 CTG7743 -----
 CTG43276 TTAATTTA---CTAATATACTTTGTGCACTTTTATCTATAACTTTAGT--AATTTAGTTTTCATTATATATATACAT
 IES42b TAAATTTGACTTCTGTATTTTTTGTGCACTTTTAA-----ATATATTTTGCATATTTATGATATAG
 IES35 ATAAATTTA-----TTAC-----TATAATGC-----GAT-----
 IES104 -----
 IES76 -----
 CTG13940 -----
 IES42 TTAATTTAATTTCTAATATTTTTTGTGCACTTAAATCCATATTGTTTATAAT--AATATATTTTCTATTAT-TGATATAT
 CTG34100 -----
 IES169 TTAATTTAACTTTAATATTTTTTGTGCACTTTTATCTATATTGCTTATAAT--AATATATTTTGCATTATA-----
 IES103 TTAATTTAACTTCTAATA--TTTCCGCACTTTTACCTGTGTTGCAATAAT--AATATATTTTGCATGATAAGGATAT
 CTG2630 -----TAACTTCTAATA-TTTTTTGTGCACTTTTAA-----ATAATATTTTGCATTAATGAAATAT
 CTG45590 -----ACTTCTATCA-TTTTTTGTGCACTTTTATATATTGCTTATAAT--ACTATATTTTGCATTATATGATATAT
AnchoisB 147 TTAATTTAACTTCTAATATTTTTTGTGCACTTTTATATATATTGCTTATAAT--AATATATTTTGCATTATATGATATAT

CTG36069 AAAACA--GTAATGCAATTATACAGCTAC--AAATATCATTTCAGGATATTT--ATTAATTTAAATCATGTAGTCTA--TTT
 IES85 -AAGCAAACTAAAGCAATTTTATGTCAGC- AAATTTTTTTCAGGATCTTAAATT-----ATTATGTATGTCTA-TTTT
 IES57 T-----AAGTAACGCAATTTAATCTTAGC- AAATTTTTTTCACATAATTC-TTAATTTATAGTATGTATGTCAATTTTT
 IES214 -----TTTTGTGGACAATCTTC
 IES105 -----ATTATTTTTATAATTTAAATTTGTATGTCTATTTTT
 IES47 -----GATATTTTTGT
 IES80 AAAGCAAA-CATCTCAATTT-ATTGCAGC-AAA-TTTTTTCAGGATATTT-ATTATTTTAAATTTATGTCTGCTATTTTT
 CTG4797
 IES77b AAAGCA-TGTAACTCATTTTATCGCAGC-AA---TTTTTCAGGATATTTTATAATTTAAATTTAT---ATTATTTTT
 CTG826 AAAGTAAATGCAA-----TTTATAGCAGCAAATTTTTTTCAGGATATTTAATTAATTTAAATTTATGATGTCTA-GTTT
 IES132 -AAACAAAGTAAAGAAATTTTATCAAT-AA-CTTTTTTCAGGAGATTTTCTTAATTTAAATTTATTTATATCTA-TTTT
 CTG7743
 CTG43276 TAAGCA-----ATTTTTAT
 IES42b GAAACAAAGTAAACGGAATTTTATCAAGC-AAA--TTTTCTCAACATATTTTA-TAAATTTAAATTTATGTATGTCTATTTTT
 IES35 -----GGATATTTTTATTATTTTA-ATTATTTAGATCTA-----
 IES104 -----
 IES76 -----
 CTG13940 -----
 IES42 AATGCAAA-----AGTATTTTTGGTAATTGAAA-----
 CTG34100 -----
 IES169 ---GCAAAGTAAAGCAATTTTTCAGCAGC- AAATCTTTTTTCAGGATATTTTATTAATTTAAATTTACGATGTGT-----
 IES103 AAGGCAAAGTAAACGCAATTTTATCGCAGT- AAATTTTTTTCAGGATATTTTGTAAATTTAAATTTATGTATGTCT-----
 CTG2630 AAAGTAAATGCAA-----TTTATAGCAGCAAATTTTTTTCAGGATATTTAATTAATTTAAATTTATGATGTCTATTTTT
 CTG45590 CAACTCAAAGTAAACGCAATTTTATCGCAGC-ATATTTTTTTCAGGATATTTTATTAATTTAAATTTATGTATGTCTATTTTT
AnchoisB 225 AAAGCAAAGTAAACGCAATTTTATCGCAGC- AAATTTTTTTCAGGATATTTTATTAATTTAAATTTATGTATGTCTATTTTT

CTG36069 CGATTTCA-TTATTATTTTC-AAAATGTTTT- AATATAACCTAAATAGCCATAGTT--TACCAATTTTTCC-AAAAAGC
 IES85 TGTAATTC-TTA---TTTC-AAAATGCTGAAATATAACCCAACCTAGCCCATACT--TGCCAATAATACC-AAAATGT
 IES57 TGT-GTCA-TTA---TTTTT-AAAATGCTGAAATAAATCAACTAGTCCATAATTTCTGCCAATTTTGGC-AGAAAT
 IES214
 IES105 TATTTACA-TT-----AACTAACCCCAATTT--T-ACAATATTGCC-AAAAAGA
 IES47
 IES80 T-TTTTCA-TTGTATTTTC--AATATGCTGAAATATTCCCAACCTAGCCCTTAACT--TGCCAATATTGCCAAAAAAT
 CTG4797
 IES77b TTTTTTCT-TTGTATTTTC-AAAG-----CAACCAACCCATAACT--TG-CAATATTGCC-AGAAAT
 CTG826 TGTTTTCA-TTTTTATTTTC--AAATGCTCAAAATATAATCCAAATAGCCCATAACT--TTCCAATA-----
 IES132 CGTTTTCA-TTATTATTTTC-AAAATGCTCTAAATATAAATAAATAGCCCTTAACT--TGGTGTATTGCC-AGAAAGT
 CTG7743
 CTG43276
 IES42b TTTTTCAATTGTTATTTTC-AAAATGCTGAAATATTCCTACTAGCCCATAACT--TGCCAATATTGCC-AGAAAT
 IES35 -----TGCCAATATTGCC-AGAAAGT
 IES104 -----
 IES76 -----
 CTG13940 -----
 IES42 -----
 CTG34100 -----
 IES169 ----TTCA-TTGTATTTTC-AAAATGCTGAAATATTCCCAACCTAGCCCATAACT--TTTCAAATTGCC-AGAAAT
 IES103
 CTG2630 TGGTTTTCA-TTATTATTTTCAAAAATGCCGAAATACTCCCAACCTAGCCCATAACT--TGCCAATATTGCC-GGAAAGT
 CTG45590 TGGTTTTCA-TTGTATTTTC-AAAATGCTGAAATATC-CCAACTAGCCCATAACT--TGCCAATATTGCC-AAAAAGT
AnchoisB 304 TGGTTTTCA-TTGTATTTTC-AAAATGCTGAAATATAACCCAACCTAGCCCATAACT--TGCCAATATTGCC-AGAAAGT

CTG36069 ACTGTTTGAATAATTGAACATTAAGG-CTCATCGTTTTATTT-T-ATTAAAAG-TTAAAG---AAACATTTGGAA--
 IES85 ATCGTTTTGATGATCAA--ATCAAGG-CCTATCGT-TTATTCTG-ATTGAAA- TTGAAG-----AAAATTTGGAA--
 IES57 AATGTTTTGGTAATTGACATCAAGG-CCCATGTTTTTTTTTT-ATTAAA-AA-TTGAAA---ATAAATTTGGAA--
 IES214 -----ATATGGAA--
 IES105 ATTGTTTGGGTAATTGAACATCAAGG-CCCATCGTTTAAATTTGT-ATTGAATA-TTGAAG---AAGAAATTTGGAA--
 IES47 -----
 IES80 ATTGTTTGGGTAATTGAACATCAAGG-CCCATCGTTTTATTTGT-A-----
 CTG4797
 IES77b ATTTTTC--ATAATTGAACATCGAGA-CCCATCTTTTTATATGT-ATTGAATACTTGAAGTTTTTAAAATTTGAAATG
 CTG826 -----CATCA-----TTTATAT--ATTGAAA- TTGGG---AAAATTTGGAA--
 IES132 ATTGTTTTGGTAATTGAACATCAAGG-CCCATCGTTTAAATTTGT-ATTGAATA-TTGAAG---AAAATTTGGTA--
 CTG7743 -----
 CTG43276
 IES42b ATTGTTTGGGTAATTGAACATCAAGG-CCCATCGTTTTATTTCTG-ATTGAACAT-TTGAAG---AAAATTTGGAA--
 IES35 ATTGTTTGGGTAATTGAACATCAAGG-CCCATCGTTTTATTTGT-ATTGAATA-TTGAAG---AAAAA-TTGGAA--
 IES104 -----
 IES76 -----
 CTG13940 -----
 IES42 -----ATCAAGG-CCGATT-TTTTATTTGT-GTTGAATGA-TTGAGG---AAAAAATTGGAA--
 CTG34100 -----
 IES169 ATTGTTTGGGTAATTGAACATCAAGG-ACGATCGT-----GTTGAACATA-TTGAGA---AAATATTTAGAA--
 IES103
 CTG2630 ATTGTTTGGGTAATTGAACATCAAGG-CCCATCGTTTTATTTAT-GTTGAACATA-TTGAGA---AAAATTTGGAA--
 CTG45590 ATTAATTTGGATAAATTGAATTAAGG-CCCATCTTTGTTATTTGTAATTGAACATA-TTGAGG---TAAAATTTGGAA--
AnchoisB 379 ATTGTTTGGGTAATTGAACATCAAGG-CCCATCGTTTTATTTGT-ATTGAACATA-TTGAGG---AAAATTTGGAA--

CTG36069 -----TTATAATTATAGTTTGGCTAAGAA---AAACCAACATAGAGAACA-AAAAATTATF-AGAAAATGT--TATAGC
IES85 -----TTAGAAATATGGGTTGGCAAACGAA---AAATCAACACTGAAGAA-AAAATAGTTAATCTTAAAGATAT----GC
IES57 -----TTAGAATTATAGATTGGCTAAGGAAACAA-----CAGGAGAACA-AAACAGTTTA-----
IES214 -----TTAGAATTATAGATTGGCTAAGGAAACAA-----AAATCAACGCAAGAGACCA-AAAC-GTTTACAGATAA-GCATTTTAGC
IES105 -----TTAGAATTATAGTTTGGGTAAGGAAATAAATCAACGAAGGACAACA-AAAAAGTTTATCAAAAAAGTATTGGAAC
IES47 -----TTAGAATTATAGTTTGGGTAAGGAAATAAATCAACGAAGGACAACA-AAAAAGTTTATCAAAAAAGTATTGGAAC
IES80 -----TTAGAATTATAGTTTGGGTAAGGAAATAAATCAACGAAGGACAACA-AAAAAGTTTATCAAAAAAGTATTGGAAC
CTG4797 -----TTAGAATTATAGTTTGGGTAAGGAAATAAATCAACGAAGGACAACA-AAAAAGTTTATCAAAAAAGTATTGGAAC
IES77b GTTTTTGAATATTTTGGGTAAGGATA--CAT-AAA-----GAACAATAAAAGTTTATAGAAAAAGTATTGC-GC
CTG826 A-----TTAAATTTATAGGTCGGCTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTATC
IES132 -----TTAGAATT---GGTTAACTACGAGAAA-AAATCAAAGCTGGAGAACA-AAAAA-TTTATAGAAAA-ATATTTTTCG
CTG7743 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
CTG43276 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
IES42b -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
IES35 -----TTA-AATTATAGTTTGGCTAAGGAAA-AAATCAACTTAGAAGAACA-ACAAAGTTTATAGAAAAAGTATTGTAGC
IES104 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
IES76 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
CTG13940 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
IES42 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
CTG34100 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
IES169 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
IES103 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
CTG2630 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
CTG45590 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC
AnchoisB 449 -----TTAGAATTATAGTTTGGGTAAGGAAA-AAATCAACGCAAGAGAACCA-ATAAAGTTTATAGAAAAAGTATTGTAGC

CTG36069 CAGGTTT-AGCAAACA--AATTAATAAATAA-CATAAAGATA-TTAAGATAATAAACAAGGATCTAAATAATTTGATGGAA
IES85 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES57 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES214 AAGGCTT-AGCAAATTTCTAATAAATGAATCTAGATTAAA-TTCAGATCATAAATAAAGGACCTAACATTCAGATG-AA
IES105 AAGGTTA-A--CAACATCTAATAAATGAATCTAAAAGAAA-TTCAGTTTCATAAGGAAGGACCTAACACTTAGATGGAA
IES47 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES80 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
CTG4797 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES77b AAGGTTT-TAGCAAACCTTCTAATAAATAAATAAAGAAA-AAA-TTAAGATATAAGCAAAGGAACTAATACTTAGATAAAA
CTG826 AAGT-TTA-ACCAACCTT-----GGATCTAAAAGAAA-TTCAGATCATAAGCAAAGGACCTAATTTAATAATGAAA
IES132 AAGGTTT-AGCAAACCTTCTAATAAATGAATCTAAAAGAAA-TTCAGATCATAAGCAAAGGACCTAACAGGAAGATG-AA
CTG7743 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
CTG43276 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES42b AAGGTTT-AAACAAATTTCCATT-TAATGAATCTAAAAGAAAT-TTCAGATCATAAGCAAAGGACCGAACCTTAAATG--AA
IES35 AAGGTTT-AGCAAACCTTGCATAAATAAATAAAGAAA-TTCAGATCATAAGTACTGGACCAACACTTAAAT-----
IES104 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES76 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
CTG13940 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES42 AAGGCTT-GGATGACTTCCAATAAATAAATAAAGAAA-TTCAGATCATAAGCAAAGGACCTAACACTTATATG-AA
CTG34100 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES169 AAGGTTT-AGCCATTTTCTAATAAATAAATAAAGAAA-TTCAGATATAAGCAAAGGACCTAATACTTAGATG--AA
IES103 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
CTG2630 AAGGTTT-AGCCAACCTTCAATAAATAAATAAAGAAA-TTCAGATCATAAGCAAAGGACCAAACTTAGATGAAA
CTG45590 AAGGTGT-AGC-AACTTCCAAT-AAATGAACCTAAAAGAAA-TTCAGATCATAAGCAAAGG-TCTAACACATAGATG-AA
AnchoisB 522 AAGGTTT-AGCAAACCTTCCAATAAATAAATAAAGAAA-TTCAGATCATAAGCAAAGGACCTAACACTTAGATGAAA

CTG36069 AAAAGAGCTGAAGATATTTTGTAGCAATAGCAATTTAAA-TTTCAGAAA--TAGCAAAGCTGGAAATAAATAAACA
IES85 AAAATGCTAAAGACAATATTTATCAATAGCAATTTAAA-TTTCAGAAA--TTAGCAAACAGCAG-----
IES57 AAAATGTTATAGATAATATATGGTCTATAGCAATTTAAA-TT-CATAAA--CTGCAACAGCAGTAAAGAAAATCAATA
IES214 AGAATATTAAGCCAAATCTTAAACAATAGCAATAAATAA-TTTCAGAAA--CTAGCCATTTGCAGGAAATAAATAAACA
IES105 AAAATGCTAGAGTTAATATTTCAAATAAGCAA-----CAGCAGGAAATAAATAAACA
IES47 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES80 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
CTG4797 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES77b AAAATGCTAAATAAACAATTTCTGCTAAGCAAT--AAAA-TTTTAGAAGA-----GTAGGAAATAAATAAACA
CTG826 AAAATGCTAAAGACAATTTATTTAGCAAAGAAATTAAGA-TTTC-AAAA--CTATCAGCAGCAGGAAATAA-----CA
IES132 AAAAAGTAAAGACAACATTTAT-----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
CTG7743 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
CTG43276 -----AAACTTCTTTTAAATGATACCAAACTCAA-TTCAGATCATAAGCAAAGAACCTAATGCTTAGATGAAA
IES42b AACATGTTT-TAGACAATATTTAGCAATAGCAAAA-----TTTCAGAAAAGCCTAGCAACAGCAGGAAATAAATAAAGCA
IES35 ATAATTTCTTAAGACAATATTTTGGCAATAGCAATTTAAAATTTCAATAA--CTAGCATCAGCAGAAATAAATAAATA
IES104 -----GCAATAGCAATTTAAAATAA-TTTTAGAAGA--CGAACCAATAGCAGGTAATAA--TAACA
IES76 -----GCAATAGCAATTTAAAATAA-TTTTAGAAGA--CGAACCAATAGCAGGTAATAA--TAACA
CTG13940 -----GCAATAGCAATTTAAAATAA-TTTTAGAAGA--CGAACCAATAGCAGGTAATAA--TAACA
IES42 -----GCAATAGCAATTTAAAATAA-TTTTAGAAGA--CGAACCAATAGCAGGTAATAA--TAACA
CTG34100 -----GCAATAGCAATTTAAAATAA-TTTTAGAAGA--CGAACCAATAGCAGGTAATAA--TAACA
IES169 -----GCAATAGCAATTTAAAATAA-TTTTAGAAGA--CGAACCAATAGCAGGTAATAA--TAACA
IES103 -----GCAATAGCAATTTAAAATAA-TTTTAGAAGA--CGAACCAATAGCAGGTAATAA--TAACA
CTG2630 AAATGCTAAAGACAATTTTGTAGCAATAGCAA-----TTTCAGAAAAGCCTAGCAACAGCAGGAAATAAATAAACA
CTG45590 AAAATGCTAAAGACAATTTTGTAGCAATAGCAATTTAAA-TTTCAG-AAA--CTATCAACAGCAGGAAATAAATAAACA
AnchoisB 600 AAAATGCTAAAGACAATTTTGTAGCAATAGCAATTTAAA-TTTCAGAAA--CTAGCAACAGCAGGAAATAAATAAACA

CTG36069 GAA**TAA**-TA**AGAT**-AAGAAATAGTA**TCAG**AAAAAATCAAGAT-TTAGAG**TAGAA**TAA**GTAT**TTTGAAGAAAGTTAAG
 IES85
 IES57 C-GAG**AATAAG**CTGAAGAAATAGTA**TCAG**AAAA**TAA**T**TAAGGT**-ATAGAGCAG---AA-ATTAT**GT**TGAAGAA**GGTTAAG**
 IES214 G-AAAA**AAAG**CTG-----T**GGTA****TC**---AAAAATCAA**AA**T-AT**CGAA****CAT**---CATATTA-TTTGAAGAAAGTTAAG
 IES105 G---AAAA**TAA**CAGAAAGAAATAGTA**TTTG**---AAAAATCAAGAT-GTAGAGCAG---AATATTA**ATTGAA**-AAAGTTAA**A**
 IES47 -----
 IES80 -----
 CTG4797 -----
 IES77b G-AAAGATAGGCTGAAGAAATAGTAGCAGAAAA-----
 CTG826 G-AAAA**ATAAG**CTGT**ACAA**GTAGTA**TC**---AAAGATCAAG**C**-GTAGAGCAG---AACATTATTTTGAAGAA**TTT**TAAG
 IES132 -----GCAG---AATATTA-TTTGAAGAAAGTTAA**A**
 CTG7743 -----
 CTG43276 -----
 IES42b G-AAAA-----GT**TGT**AGAAAAAAT**TAA**CAT-ATAGAA**CAG**---AACATTATTTTGAAGAA**GAT**TAAG
 IES35 GAAAAATAG**ACTGA**GGAAATA**TTAG**CAGAAAA**TAA**TCAAGAT-GTAGAGCAG---AATATTTATTTGAAGAA**GAT**TAAG
 IES104 -----G
 IES76 G-AAAAATAGGCTGAAGAAATA**TTAG**CAGAAAAAATCAAGAA-GAA**AA**GCAT---AATATTTATTTGAAGAAAGTTAAG
 CTG13940 -----
 IES42 G-AAAAAT**CGA**CTGAAGAAATA**TTAA**CAGAAAAA-TCAAGAT**TGT**CGAGTAG---GATATTTATTTGAAGAA**GGTTAA**-
 CTG34100 -----
 IES169 -----
 IES103 -----
 CTG2630 -----
 CTG45590 G-AAAAATAGGCTGAAGAAATAGTAGCAG---AAAAATCAAG**GT**-GTAGAGTAG---CGTATTTATTTT**TAAGAA**GGTTAAG
AnchoisB 677 G-AAAAATAGGCTGAAGAAATAGTAGCAGAAAAAATCAAGAT-GTAGAGCAG---AATATTTATTTTGAAGAAAGTTAAG

CTG36069 AAATAGTT-CAGAAATGGAAATG-T-AAAA**TGA**ATTAAAGAA**TAG**TAA-GGGAACA-TGATGAATATCGACA--TTT
 IES85
 IES57 AGAATAGTT-GAGAAAT**AGA**GATGCT-AAAAATGCATTAAGAATTCATA**AGAGG**-CAAGGA-GGATATCGACA-TTTT
 IES214 AGAATAGTT-GAGAAAT**TAA**TGCT**AAAA**AAAT**AC**ATTAAGAAT**TATTA**-GGGAACA-GGATGAAT**TT**CGACA-----
 IES105 AGAATAGTT-GAGAAATGGAAATGCT-**AA**TATGCATTAAGAATTCATA**G**-TGGAAACA-GGATGA**TAT****GGTA**-TTTT
 IES47 -----
 IES80 -----
 CTG4797 -----
 IES77b -----
 CTG826 AGAATAGTT-GAGAAATGGAAATGCT-AGAA**CT**GCATTAAG-ATTC**CAA**-GGGAACA-GGATGGA-----T**GT****C**
 IES132 AGAA**AA**AGTT-GA**AA**ATGG-AA**TAT**T-AGAAATGCATTA**AA**AAATTCATTA-GGG**A**TA-G-----
 CTG7743 -----
 CTG43276 -----
 IES42b AGAATAG**AT**-GAGAAATGGAAATGCT-AGAAATGCATTAAGAATTCATA**G**-GGAAACA-GGGTGTATATC**TACAT**TTTT
 IES35 AGAATAGTT-GAGAA**AA**GAATGCT-AGAAATGCATTAAG**AT**T**ATA**AA-GGGAACA-TGATGGATA**AG**GACA-T**CTT**
 IES104 AGAATAGTT-GAGAAATGGAAATGCT-AGAAAT**GT**A-TAAAGAAT**TC**GTAA-GGGAACA-TGATGGATATCGACA-TTTT
 IES76 AGAATAGTT-GAGAAAT**AA**AAATGCT-AGAAATGCATTAAGAATTCATA**A**-GG-AACA-GGATGA**AT**ATCGACA-TTTT
 CTG13940 -----
 IES42 -**AA**ATAGTT**T**GAGAAATGGAAATGCT-AGAA**T**GCATTAAGAAT**TA**CAA-GGGAA**TA**-GGAAGGATAT**C**TACA-TTTT
 CTG34100 -----
 IES169 -----
 IES103 -----
 CTG2630 -----
 CTG45590 AGAATAG**TA**-GAG**AT**ATGGAAAT**GA**T-AGAAATGCATTAAGAATTCATA**A**-GGGAACA-GGATGGAT**CT**CGACA-TTTT
AnchoisB 752 AGAATAGTT-GAGAAATGGAAATGCT-AGAAATGCATTAAGAATTCATA**A**-GGGAACA-GGATGGATATCGACA-TTTT

CTG36069 GAGCAC**AA**T**CT**AAAGAT**TT**GTAT**T**GAAAGAGGAGAAAAA**T**---**ACTTTA**AGCAGAA**AG**-----AAAGAA---**GGTTGA**
 IES85
 IES57 GAG**TACC**ATAATAAGA-TTGTAACGAAGAGGAC**AAAA**-**TT**---TC**AGTGA**A-AGAGAAG-----AAAGAA---**TAGTAGC**
 IES214 -----**TCAT**TATAAA-A-TTGTA**TG**GAAAGAGGAGAAAA**-C**---TC**ATTG**AGCA**AGA**AG-----**AAAAA**AGTTGC
 IES105 GAGCAC**AA**CA**T**TAAGA-**TC**ATAACGAAGAGGAGAAAAA**TAACT**CTTT**AA**AGAGAGA**AGTAAT**AAAGAA**T**AGTT**AC**
 IES47 -----
 IES80 -----
 CTG4797 -----
 IES77b -----
 CTG826 GAGCA**TCAT**CA**AA**AGA-TTGTAACGA**TGA**TTAG-AAAA**T**---TCTTT**TAG**CAGAGA**AG**-----AAAGAAAAAGTTGC
 IES132 -----
 CTG7743 -----
 CTG43276 -----AGCAGAA**T**---**TT****CAGA**ATATA-----
 IES42b GAGCACCATCATA**AGA**-TTGTA**CA**AAAGAGGAGAAAA**A**T---TCTTT**AA**CAGAGA**AG**-----AAAGAAAAAGTTGC
 IES35 GAGCACCAT**TAG**AAAGA-TTGTA**AA**GAAGAGGAGAAAA**A**-T---TCTTT**GAG**TAGAGA**AG**-----AAAGAAAAAGTTGC
 IES104 GAGCACCATCATA**AGA**-TTGTA**TG**GGAGGAGAAAA**GT**---TCTTT**GAG**CAGAGA**AG**-----AAAGAAAA**CA**-TTGC
 IES76 GAGCA-----**GA**AGAGAAAA**A**T---TCTTT**GAG**CA-AGA**AG**-----
 CTG13940 -----
 IES42 GAGCACCATCATA**CGA**-TTGTAACGA**G**GAGGAG-AAAA**T**---TCTTT**GAG**GAGAGA**AG**-----AA**T**GAAAA**T**GT**TC**
 CTG34100 -----
 IES169 GAGCA**TAT**ATA**AGA**-TTGTAACGA**AA**AGGAGAGAA**A**T---TCTTT**GAT**AGAGA**AG**-----**GA**AGAAAAAG**TC**GC
 IES103 -----
 CTG2630 -----
 CTG45590 GAGCACCATCAT**TA**AGA-TTGTA**AA**GAAGAGGAG---AA**A**T---T**TTT**TGAGCAGAGA**AG**-----AA**T**GAAAA**A**TTGC
AnchoisB 827 GAGCACCATCATA**AGA**-TTGTAACGAAGAGGAGAAAA**A**T---TCTTT**GAG**CAGAGA**AG**-----AAAGAAAAAGTTGC

CTG36069 AGAATCATAGCAATAGCAAGTAGAAAAATGATACATATATATAGATTAAAT-TAAATAATATTT--GATCTTTTTGTTTT
 IES85 -----AAATATAAC-----
 IES57 A----CA--GCCATAGCAAATTGGAAAATGATGTATATATAGATATAAAAAT-TATGCAATTATTT--TATCTTTTTGTTTC
 IES214 AGAATC---GTAATAGT---AGCATAATGAT-TAT-TATAAATAAAAAA-TAAATAATATTT--GATCTTCTT-TTT
 IES105 AGAATCGTCACTA-TAGCAAGAAGAAAAATATATCTGTATATATATAAACAT-TATAATAATATTT--GATCATTTTTATTT
 IES47 -----
 IES80 -----
 CTG4797 -----
 IES77b -----AAATTAAGAT-----
 CTG826 AGAATCATAGCAATAGCAAG-GGAAAAATGATATATATA--AACATAAAAAT-TATACTTTGATT--GATCTTTTTGTTTT
 IES132 -----
 CTG7743 -----
 CTG43276 -----TTATAAATTATAAAAC-TAAAGATTATTT--GATCTTTTT-TTTA
 IES42b TGAATCATAGAAAACAGCAAGAAAAAATCATGATATATTTATAAATAAAAA-T-TAGAGATTATTT--GATCTTTTATTTTT
 IES35 AGACTCACAGCAATAGCAAGAAGAAATCATATATATTTATAAATAAAAAAT-TAGAGAATATTT--GATCGTTTTGTTT-
 IES104 AGAATCATAGCAAAGCAAGAAGAAAAATGATATATATTTAAATAAAAAATGTTAGAGAATATTT--GATCTATTT-TTTT
 IES76 -----AAAATGAATATATATAAATAAATAA-T-TAGAGAATGTTTTTGATCTTTTTGTTTT
 CTG13940 -----
 IES42 AAAATCATTGCAATAGCAAGTAGAAAAATGATATATATATAAATAAATAAAT-TAGTGAATATTT--GATCAATTTAAAAAA
 CTG34100 -----
 IES169 AGAATCCTAGCAGTAGCAAGTAGAAAAATGATATATATATAAATAAAGT-TAGAGAATATTT--GATTTTTTTT-TT--
 IES103 -----
 CTG2630 -----
 CTG45590 AGAATCATAGCAGTAGCAGGAAGAAAAATG-----ATATAAATAAATAAAT-TAGAGAATATTT--GATCTTTTT-TTTT
AnchoisB 898 AGAATCATAGCAATAGCAAGAAGAAAAATGATATATATATAAATAAATAAAT-TAGAGAATATTT--GATCTTTTTGTTTT

CTG36069 -TTATC-ATT-----AATAATTATCAATTTTCACTTT-AAAAAGCTGCGCGTTTATTAACTTCTTTTAAATTTCC
 IES85 -----
 IES57 -GTTTA-CG-----AATCTTTATTCATTTTCTTCTTT--AAATGAAAGCGC--TTATTAACTTCTTCTTAAA-TTCC
 IES214 -GTTTTCAATTT--AATAATTATCAATTTG-CCTTCTTT-AAAAAGACTATGC--TCAT-AAAC-TCTTTTAAA-TGAC
 IES105 TGAAC-ATT-----AATAATTATCA-----CTTT-AAAAATGATTGCTC--TTATTAAATTTCCACTCAA-TTCC
 IES47 -----TCAATTT-CCTTCTTT-AAA---TGAC--TTATTGAACCTTCTTCTTTA-TTCC
 IES80 -----
 CTG4797 -----C--TTATTAACTTCTTCTTAAA-TTTC
 IES77b -----
 CTG826 -GTTTT-GTTTATTAATAATTCTTTAATTT-CCTTCTTT-AAAAAGACTGTGT--TTATTAAATATCTCTTAAA-----
 IES132 -----
 CTG7743 -----
 CTG43276 -A-----ATT-----AATAATTATCAATTT-CTCCTTT--AAACGACTGCGC--TTATTAACTTCTTCTTT-----
 IES42b -AT-----AATAATCAATTT-TTCTTT-AAAAAATGCGC--ATATTAAA--ATTCTTAAA-TTCA
 IES35 -GTTT-ATT-----AATAATTATCAATTT-CCTTTT-AAAA-AACTGTGG--TTATTAAACATCTTCTTAAA-TTCC
 IES104 -T-ATT-----ACTAATTATTTGATTT-CCTTCTTTAAAAACGAAATGCC--TTATTAACTTCTTCTTAAA-TTCC
 IES76 -GTTTT-ATTAAATAAAATTTATCAATTT-CCTTCTTT-ACAACGACTGCC--TTATTAACTTCTTCTTAAA-TTCC
 CTG13940 -----
 IES42 -----AATAATTATCAATTT-CCTTCTTT-GAAATGACTGCGC--TTATTAACTTCTTATTAAA-TTCC
 CTG34100 -----
 IES169 -----AATAATTATCAATTT-ATTCTTT-AAAAAGACTGCGC--TTATTAACTTCTTTTAAA-CTCC
 IES103 -----TCTTAAA-TTCC
 CTG2630 -----
 CTG45590 -----T-ATT-----AATAATTATTTAATTT-CCTTCTTT-GAAACGAACTGCGC--TTATTAACTTCTTCTTAAA-TTCC
AnchoisB 975 -GTTTT-ATT-----AATAATTATCAATTT-CCTTCTTT-AAAAAGACTGCGC--TTATTAACTTCTTCTTAAA-TTCC

CTG36069 TTAATTTATTGTTCTAGCTCCTCGGTTAGCTTTGATAATTTAAGCAATTTTTT-TGCTTAAA--T--GACCTCTTTACA
 IES85 -----
 IES57 TTAATTTATTTGTTCAAACCTTCAATTACTTTTGACAATATATGCAATTTTTTTTGCATTAA--T--GAGCTCTTGCA
 IES214 TTAGTTTATTAGTTATAACTAGTCAGCTAACTTTGATAATTTAAGTAGTTTTTTT--GCTTAAAT--T-----
 IES105 TTAATTTATTTGT-----
 IES47 -TAATTTATTTGTTCTAGCTCTTTAGTTAACTTAGATAATTTAGCATTCTT--GGTTAAA--T-----GCG
 IES80 -----
 CTG4797 -----
 IES77b GTAA---TCATTCTAATCTATTAGATAACTTTGATAATTTAAGCAATGTTTT-TGCTTAAA--T--AAGCTCTTTGCG
 CTG826 -----TTATTTCTTCTAATCTTCCGGTTAACTTTGATAATTTAAGCAATTTTTT-----
 IES132 -----TATTTTATTTCTTCACTTAACTTTGATAATTTAAGTAAATTTTTT-TGCTTAAA--T--GAACTCTTACA
 CTG7743 -----
 CTG43276 -----TGATAATAAAGCAATTTTTA--GCTTAAA--T--AAGATCATTGCA
 IES42b TTAATGTATTTATTTCTAATCTTTCAGTTAACTTTGATAATTTGCGCAATATTTT--GCATAAAAATAAAGTCTTTGCT
 IES35 TTAATTTATTTAATTTCTAATCTTTCAGTTAACTTTAATAATTTAAACAAATTTTTT--GCTTAAA--T--AAGCTCTTTGC-
 IES104 TTAATTTATTTATTTCTAATCTTTCAGTTAACTTTGATAATTTAA--AAATTAATTTTGTTTAAAT--T--AAGTCTTTACA
 IES76 TTAATTTATTTATTTCTAATCTTTCAGTTAACTTTGATAATTTAAGCAACTATTT-TGTTTTAAA--T--AAGCTCTTTTCG
 CTG13940 -----
 IES42 TTAATTTATTTATTTAACCCTTTCAGTTAACTTAGATAATTTAGAGCAAATTTTT-TGCTTAAA--T--AAGCTCTTTGCG
 CTG34100 -----
 IES169 TTAA-TTATTTATTTCTAATCTTTCAGTTAAATTTGATAATTTAAGCAATTTTTT-TGCTTAAAG--T--AAGATCTTTGCTG
 IES103 TTAATTTATTTATTTCTAATCTTTAGTTAACTTTGATAATTTAAGCAATCTTTCTTTTAAA--T--AAACT-----
 CTG2630 -----TTAATAATTTAAG-----
 CTG45590 TTAATTTATTTATTTCTAATCTTTCAGTTAACTTTGATAATTTAAGCAATTTTTT-TGCTTAAA--T--AAGCTCTTTGCG
AnchoisB 1043 TTAATTTATTTATTTCTAATCTTTCAGTTAACTTTGATAATTTAAGCAATTTTTT-TGCTTAAA--T--AAGCTCTTTGCG

CTG36069 ----TGTTTTTTTTCG-TACATCT-----
 IES85 -----
 IES57 ATCCTCGATTTTCTTTGC-AGCATATTATTTAAATTTCTCAACTTGATCCTTCGTTCTGCAA-----
 IES214 -----
 IES105 -----
 IES47 ---CT-CTTTGGCTTTGC-TGCATCTCATTTAAATTTCTCAAATTGCTCCTTCGTTCTGTGTAAACATCTCATCCATCC
 IES80 -----
 CTG4797 -----
 IES77b AG-----C-TGCATCTTATTTAAATTTCTTAACTTGCTCCTTCCTTCTGCAATAATATCTCA---ACT-
 CTG826 -----
 IES132 AACCTGCTTTTTCCTTAA-TTCACCTTA--AAATTTCTAACTTGCTCCTTCGTTCTGCTGAAATATCTCA---TCT-
 CTG7743 -----
 CTG43276 AGCTTGCTTTTATTTCG-TACATCTTACTTAAATTTCTCAACTTTCTCCTTCATTCGGAGGAAATATCTCA---ACT-
 IES42b AACCTGCTTTTTCCTTGCCTGTTCTAA-TTAAATTTCTCAACTTGCTCATTTATTCTGCAAAAATATCTCA---ACT-
 IES35 -----TTAC---ACTTGCTCCTTCCTTCTGCGGAAATATCTCA---AAT-
 IES104 AGTCTGCTTTTTCCTTGC-TGCATCTTATTTTAAATTTCTCAACATGCTCCTTCGTTCTGCGGTATTTATCTCA---ACT-
 IES76 AGGCTGCTT-----TGGC-TGCATCTTATTTAAATTTCTCAACATGATCCTTCGTTTACAAAATATTTCA---ACTA
 CTG13940 -----
 IES42 AGCA-GGTTTTACTTAGC-TGCATCTTCTTAAA-TTCTCAACTCGCTTCTTCGTTCTTCGGAAATATCTCA---ACT-
 CTG34100 -----
 IES169 AGCCTGCTTTTTCCTTAC-TGCATCTTATTTAAATTTCTCAACTT-----CTCA---AC--
 IES103 -----
 CTG2630 -----
 CTG45590 AGAC-GCTTTTTCGTTTC-TGCATCTTATTTAAATTTCTCAACATGCTCCTTCGTTCTGCGGAAATATCTCA---GCT-
AnchoisB 1118 AGCCTGCTTTTTCCTTGC-TGCATCTTATTTAAATTTCTCAACTTGCTCCTTCGTTCTGCGGAAATATCTCA---ACT-

CTG36069 -----TAATTAAGAATGAACTTTTAAATTCAAAATACTTTCAACAG-ATCATCTTA
 IES85 -----TCTTAATTGAAATAACTTTTCATTAG-ATAATTTTG
 IES57 -----
 IES214 -----
 IES105 -----
 IES47 TTTTGTTCCTCAGATAGATATATCTAATTAAGAAT-ATAT-TTTGAATTGAAATAGCTTTTATATTAG-ATCATCTTG
 IES80 -----
 CTG4797 -----
 IES77b TTTTGTTCCTCCAATAATGTATCTAATTAACGAATCAAACTTTTTAATTGGAATAACTGTTACATTGG-ATTATCTTG
 CTG826 -----
 IES132 CTTTGTTCATCCAATAAATGGATCTAATTGACAATCAAAC-TTTTAATTGAAATAACTGTTACATTAGAAATATCTTG
 CTG7743 -----
 CTG43276 T-TAGTTTCTCCAATAGATGTATCTAATTAACGAATCAAAC-TTTTAATTGAAATAACTGTTATATTAG-AAATCTTG
 IES42b TTTTGTTCCTAGAATAGATGTATCTAATTAAGAATCAAAC-TTTTAATTAAAATAACTGTTACATTAG-ATCATCTAG
 IES35 TTTTGTTCCTCCAATAGATTTTCTAATTAATTAATCAAAC--TTTAATTGAAATAACTGTTATATTAG-ATCATATTG
 IES104 TTTTGTTCCTCCAATAATTTATCTAATTAAGAATCAAAC-TTTTAATTGGAATAACTGTTATATTAG-ATCATCTTG
 IES76 CTTTGTTCCTCCAATAGATGTATCTAATAAGGAATCAAAC-TTTTAATTGAAATAACTTTTACATTAG-ATCATCTTG
 CTG13940 -----
 IES42 ATTTGTTCCTACGATAGATATATCTAATTAACGAATCAAAC-TTTT-----AAATAACTGTTAGATTAG-ATCATCTTG
 CTG34100 -----
 IES169 TTTTGTTCCTCCAATGAATGTATCTAATTAACGAACCAAAC-TTTTAATTGAAATAAATTGTTAAATTG-ATCATCTTG
 IES103 -----
 CTG2630 -----
 CTG45590 TTTTGTTCCTCCAATAGATGTATCTAATTAACGAATCAAAC-TTTTAATTAAAATAACTGTTACGTTAG-ATCATCTTG
AnchoisB 1192 TTTTGTTCCTCCAATAGATGTATCTAATTAACGAATCAAAC--TTTAATTGAAATAACTGTTACATTAG-ATCATCTTG

CTG36069 TGTAA-ATTTGATTAATACTTCATTTT-GGGTCTTGAATAAAGAATGATTAGGATCTATCG-TTTAAGAATATTGACA
 IES85 CGTAAGATTTTATTAATTTTGTGCAATTTGGTCTTGAATTAAGAATAAATTCGGGCTATTCG-TTTAAGAATATTGACT
 IES57 -----
 IES214 -----
 IES105 -----
 IES47 CGAATGA-TTGATGAATCTTGCAATTTTGTGTTCT-AGTAAAGAATAAATTCGGATCCATCA-TTTAAGATAATTGACT
 IES80 -----
 CTG4797 -----
 IES77b CGTAAGATTTGATTAATCTTGCAATTTAGGTTTGTGAATAAAGAATGATTTCGGATCTATCG-TTTAAGAATATTGACT
 CTG826 -----TGATTAATACTTACGCTTT-GGG-TTTGAATAAAGAATGATTTAAATCTATCGCTTTTATTTATATCGACT
 IES132 GGAGAAATTTGATTAATCTTGCACTTT-TGGTCTCGAATAAAGAATAAATTTGGATCTATCG-TTTTAC-AATATTGACT
 CTG7743 -----
 CTG43276 CTTAAGATCTGATTTATCATAACATTTTGGTCTTGAATAAAGAATGATTGGATCTATCT-TTTAAGAATATTGACT
 IES42b CTTAAGACTTGATTAATCTTGCACTTT-GGGTCTTGAATAAAGAAGGTTTGGATCTATTG-TTTAAGGATATTGACT
 IES35 CATTAGATTAAGATTAATCTTGCGCTTTTGGTCTTGAATAAAGAATGATTGGATCTATCG-CTTTAAGAATATTGACT
 IES104 TGAAGGTTTGAATTAATCTTGCAATTTTGTGATCTTGAATAAAGAATGATTTCGGATCTATCG-TTTAAGAATGTTGAT
 IES76 TGTAATGATTTGATTAATCTTGCACTTG-AGGTTCTTGAATAAAGAATGATTGGATTTATCG-TTTAAGAAGATTAGT
 CTG13940 -----
 IES42 TGTAAGGTTTGAATTAATCATGCACTTGGGGTCTTGAATAAAGAATGATTTCGGATCTATCG-TTTAAGAATATTGAA
 CTG34100 -----AATAAACAATGATTGGAAATATTG-TTTTAAATATTGACT
 IES169 CGTAAGATTTGATTAAGCATGCACTTGGGGTCTTGAATAAAGAATGAATTCGGATCTACCG-TTTAAGAATTTTG---
 IES103 -----
 CTG2630 -----
 CTG45590 ATTAAGA-TTGATTAATGATGCACTTGGGGTCTTGAATAAAGAATGATTTCGATCTATCG-TTTAAGAATATTG-CT
AnchoisB 1269 CGTAAGATTTGATTAATCTTGCACTTT-GGGTCTTGAATAAAGAATGATTTCGGATCTATCG-TTTAAGAATATTGACT

CTG36069 G-A-CATTTATAATCATGGTGTTC-ATGGG-AAA-----TTTAAAT----
IES85 GTC-CATGTTTTATCAGAGTATCTTCAATCAGCAAAGCCA-----AGCTCTAGCCATTTGTTTCTTTTAAATCTTG
IES57 -----
IES214 -----
IES105 -----
IES47 GCC-CAATATTTATCAGTGTAGTTCCATCAACAAA-ACCA-----A-CACTTTGCCATTTAGCTCCTTTTAAAGTCTCA
IES80 -----
CTG4797 -----
IES77b ACC-CATATTTTATCAGAGTAGTTTCCATCACCATC-ACCATGGCCGAGCACTTAGCCAT-TAGTTTCAATAAAATCTCG
CTG826 GGC-TATGTTTTATCAGGTAGTTTTCATCAGCAA-GCCA-----GCCTCTTAGACATATAGTTTCTTTTAAATCTGG
IES132 GTT-CTTGTTTTATCAGGGTATCTTCCATGAGCAA-GCCA-----AGCTCTTAGCCATTTAGTTTCTTT-AAATCTCG
CTG7743 -----
CTG43276 GCC-CATGTTTTATCAGAGTAGTTTCCATCATCAAA-GCCA-----AGATCTTAGCCATTTAGTTTCTTTAAATCTCG
IES42b GCC-AATGTTTTATCAGATTAGTTTCCATCA-CAA-GCCA-----AACTCTTAGCCATTTAGTTTCTTTAAATCTCG
IES35 CCCTTTTGTTCTATCAGGGTAGTCTCCATCAGTAA-GCCA-----AGCTCTTAGCCATTTAGTTTCTTTCAATCTCG
IES104 GCC-CATATTTTATCAGGGTATTTTCCATCACCAA-GCTA-----AGCTCTTAGCCATTTAGTATCTTTTAAATCTCTT
IES76 GCC-AATGTTTTATCAGGGTAGTTTAAATGGCAA-GTCA-----AGCATTTAGCCATTTAATTTCTTTT-ATCTCTG
CTG13940 -----
IES42 ACC-CATGTTTTATCAGGATGGTTTCCATCACCAA-CCCA-----AG--CTTAGCTATTTAGTTTCTTTTAAATCTCG
CTG34100 GCC-CATATTTTATCAGGGTAGTTTCCATCAGCAA-GCCA-----AGCTCTCACCATTTAGTTTAAAT-AAATCTTG
IES169 -----
IES103 -----
CTG2630 -----
CTG45590 GCC-CAAGTTTTGTCAGGGTGTGTTTCCATCACCAA-GCCA-----AGCTCTAAGCCATTTAGTTTCTTTTAAATCTAG
AnchoisB 1347 GCC-CATGTTTTATCAGGGTAGTTTCCATCAGCAA-GCCA-----AGCTCTTAGCCATTTAGTTTCTTTTAAATCTCG

CTG36069 -----FACTTGATTCACACCTA AAAAATT
IES85 TGTA AAA--TTTC-CTCTTTTGTGGTTGATCTTAGCAATATCTTATTTGACCTTTTTTTTTTATTCAAACCTAAACAATT
IES57 -----
IES214 -----TTATTTG AAC-TTTTTTTGATTC TAAGCTAAATATA
IES105 -----TTTCTCTTTAATT-----
IES47 TGTA AAA--TTAC-CACTTTAGTTGCTGATCTTAGCAGTTATCCTAATTGA-C-CTTTTTGATTC TAAGC-----
IES80 -----
CTG4797 -----
IES77b TGTA AAA--CTTC-CTCTTTAGTTGCTGATCTTACCAATCTCCTATTTG AAC-TTTTTTTGATTC TAAGCGTTAGCATT
CTG826 TGTA TAA--ATTTCTCTCTTAGTTGCTGATCTT-----ATTTGAGC-TTTCGTAG--TATTAGCTTAAGCATT
IES132 TATAAAA--TATC-CTCTTTAGTTGCTAATCTTAGCAATATCATATTTG AAC--TTTTTTGATTC TAAGATAAAACTTA
CTG7743 -----
CTG43276 TGTA AAT--TTTC-CTCTTTAGTTGCTTATCTTAGCAATATCCTA-----TTTGATTC TAAGCTATAGCATT
IES42b AGTAAAA--TTAC-CTCTTTAGTCTGATCTTAGCAATATCCTAATTG AAT-CTTTTTTGATT-----TAGAATT
IES35 TGTA AAA--TTTC-CTCTTTAGTTGTTGATCTTAGCAATCACACTATTTG AAC--TTTTTTGATTC AAAGCTAAAGCATT
IES104 GTTAAAAATTTTTCCTTTAATTTGTTGA ACTT-----
IES76 TGTA AAA--TTTC-CTCTTTA TTTGCTGATCTTAGCAATATCCTATTTG AAC-TTTTTTTGATT TTAGCTAAAGCAA
CTG13940 -----
IES42 TGTA AAA--TTTACTCTTTAGTTTCTGATCTTAGCA TTTATCCTATTTT AAC-TATTTTTGATTC CAGCTATAGCATT
CTG34100 TGTA AAA--TTTT-CTCTTTAGTCTGATCATAGCTATTATCCTATTTG AAC-TTTTTTTGATTC TAAGCTAAAGCATT
IES169 TGTA AAA--TTTC-CTCTTTAGTTTATGAACTTAGCTATTATCC AATTG AAC-TTTTTTTGATTC TAAGCTATAGCATT
IES103 TGTA --A--TTTC-CTTTATAATTTGCTGATCTTAGCAATATCC CATTGATC-TTTTTTTGATTC TAAGCTATAGCATT
CTG2630 TGTA AAA--TTTT-CTCTTTTATTGCTGATCTTAGCAATATCCTATTTG AAC--TTTTTTGATTC TAAGCTATAACATT
CTG45590 TGTA TAA--TTTC-CTCTTTAGTTGCTGATCTTAGCAATATCCTATTTT AAC-ATTTTTTTGATTC TAATCTATAGCATT
AnchoisB 1419 TGTA AAA--TTTC-CTCTTTAGTTGCTGATCTTAGCAATATCCTATTTG AAC-TTTTTTTGATTC TAAGCTATAGCATT

CTG36069 TT--GAAGTAACT-----ATTA-TATGC--TGTTACATCTGATGAATGGATAAG-GGCAAGTAATATCTGCA AAG
IES85 TATTTGTAGCAACTCTGAGCCGATATTACGC--TGTTACACTGAAGAATGGATCGCG-----ATATCCCGCTAAT
IES57 -----
IES214 TTTT-GTACAAACCCCGAGCAAAGTTACG-----
IES105 -----
IES47 -----
IES80 -----
CTG4797 -----
IES77b TTTA-ATAGCAACTCGAGCAAATATTATTC--TGTTACACTGGAAGAATGAATCGCG-GGCAAATAATATCCCGCTAAG
CTG826 TTTT-GTAGTAACCTCTGAGCAAATATTACACTTTTACACCTGAAGAATGGATCTCT-GGTATAAAATAT-CGACTAAA
IES132 ATTTTGTAGCTACCCTAATAAATATTAACT--TGTTACACTGAAGAATGATCGCG-GGCAAATAATATCCCGCTAAG
CTG7743 -----
CTG43276 TTTT-GTAGCAAACCTGAGCAGATATTATGC--TGCTACACCTAAGAATGGATCTC--AACAAATAATATCCCGCTTAG
IES42b TATTT-TAGTAACCTCTGACAA-TGTTATGTC--TGTTACTCATGAAGAATGGATCGCG-GACGATAA-----
IES35 GTT--GTTGCAACTCTGAGCAAATCTTACT--TGTTACACTGAAGAAGGGATCGAG-GGAAAATAATATCCGCTAAG
IES104 TTTT-GTCTGCTGAGCAAATATTAAAGC--TGTTACACCTGAAGAATGGATGTA-GGCAAATAATGTA CTGCTAAG
IES76 -----
CTG13940 -----
IES42 TTTT-GTAGTAACTCTGAGCAA-TAGTAAGC--TGTTACA ACTGAAGAATGGATGCG-GGCAAGTA-----CTTAG
CTG34100 TTGTTGTAA AACTCTGAGCAAAGTAGTTCGC--TGTTAATCTGAAGAATGGATCGCGAGGCAAAATATTATCTACTAAG
IES169 TTTT-GTAA-AACTCTGAGCAAATATTAAAGC--TGTTCCACCTGAAGAAGGGATCGCG--TGCAAATAATATCCACTAAG
IES103 TTTTATAGCAAATCTGAGCAAATATTACGC--TGTTACACTGAAGAATGGATCGCG-GGCAAATAATAT-----
CTG2630 TTTT-GTCGCAACTCTGAGCAAAGTAGTTCGC--TTTACACTTAAGAATGGATCAAG-GGCAAATAACATCCCGTTAAG
CTG45590 TTTT-TAGCAACTCTGAGCAAATATTACGC--TGTTATATCTGAAGAATGAATCGCG-GGCAAATAATATCCCGCTAAG
AnchoisB 1495 TTTTGTAGCAACTCTGAGCAAATATTACGC--TGTTACACTGAAGAATGGATCGCG-GGCAAATAATATCCCGCTAAG

CTG36069 -----
 IES85 TTC-----ATT**TTTG**-CTTTTAAAGTATAAAAT-ATA**CTTAC**-----ATTTTATTGG**ACAT**TATTTCTAA**TTTCA**-----TT
 IES57 -----
 IES214 -----AATT-ATAACTAT**C**-----ATTTTATTGG**A**-----TTTTTAAAT**TTA**AGATTT
 IES105 TTA-----ATTATTATTTTT**CAAT**TCAA--G-ATAAC-AG**TTAT**ATTATTATTGG**A**--TCATTTTAAAT**TTCA**AGAT**CG**
 IES47 TTA**A**--ATTATTATTTTT**GTAA**-TATAAAT**TCATA**ACT**TAC**-----ATTTT**CCAT**TCAA-----
 IES80 -----
 CTG4797 -----
 IES77b -----
 CTG826 -----GTTT**TTATTGTA**--TTATTTTAAAT**TTCA**AGA--TT
 IES132 TTA-----ATT-**TT**-TTTTTAAATATAAAAT-ATA**ATTAA**C-----AT**TCAT**TATTGG**A**--TTAT-GTTAAAT**TTCA**AGATTT
 CTG7743 -----
 CTG43276 TCA-----ATTAG**TG**-CTTTTAAATATAAAAT-ATAACTAG**C**-----T**TT**C-----GGA--T**AA**-TTTTAAAT**TTA**AGATTT
 IES42b -----
 IES35 -----ACTATTATTT**ATAG**ATACAAAT-ATA**CTA**-----AAAT**TTAA**-----
 IES104 TTA**ATTAA**TATTATTATTTTTAAATATAAAAT-ATAACT**AA**-----AT**CTT**TATTGG**A**--TTATTTTAAAT**TTCA**AGA--T
 IES76 TTA-----T**AAA**ATATAAAAT-A-**AA**TTAG**C**-----AT**CTT**TATTGG**A**--TTA**AT**CTAAAT**TTCA**AGAT**TG**
 CTG13940 -----
 IES42 TTA-----ATTATTATTTTTTAAAT**AGAA**AT-ATAACTAG**C**-----AT**CTT**TATTGG**A**--TTATTT**ATA**AAAT**TTCA**AGAT**CT**
 CTG34100 TTA-**TTT**ATATTATTTTTTAAAT**ATAG**AT-ATAACT**AA**C-----AT**TG**TTATTGG**A**--**GT**ATTTAAAT**TTAA**AG**TTT**
 IES169 TTA-----ATT**ATA**-TTTTTAAAT**TAAA**AT-ATAACTAT**C**-----**CT**CTTATTGG**A**--TTAT**GT**TTAAAT**TTA**AG**AGT**
 IES103 TTA-----TAG**T**ATTTTTTAAAT**ATAT**AT-ATA**ATTAG**TA-----AT**CTT**TATTGG**A**--TTAT-**TTA**TAT**TTCA**AG**TAT**
 CTG2630 TTA-----ATT**ACT**ATTTTTTAAAT**TTAAA**AT-ATA**ACA**AG**C**-----AT**CTT**TATTGG**A**--TTATTTTAAAT**TTCA**AGAT**TT**
 CTG45590 TTA-----ATT**GG**TATTTTTTAAATATAAAAT-ATA**ATTAG**C-----AT**CTT**TATTGG**A**--TTAT**AT**TTAAAT**TTCA**AGAT**TT**
AnchoisB 1782 TTA-----ATTATTATTTTTTAAATATAAAAT-ATAACTAG**C**-----AT**CTT**TATTGG**A**--TTATTTTAAAT**TTCA**AGAT**TT**

CTG36069 -----
 IES85 TTTT**CA**TA**AA**TTG**CA**AA**TAT**TTTT**C**-----AG**TC**AA**TTT**TTAT**TAT**GGAT**GTTAGTG**AA**TTTTA**AA**TAT**
 IES57 -----
 IES214 TTTT**TT**AA**AT**T**G**AA**AA**AT**TTTT**TT**C**-----AT**TC**AA**TTT**TAT**CT**TTGGAT**ATTC**AT**TGA**AT**TTT**G**AA**TAT
 IES105 TTTT**CA**AA**AT**T**T**CA**AA**AT**TTTT**TT**C**-----AT**TT**AA**AT**TAT**TGG**AT**GTTGG**CA**TGA**AT**TTT**GA**AA**A**AT**
 IES47 -----T**TT**TAT**AA**T**G**AA**AG**AT**TAT**-TGA**AT**TT**T**G**AA**-----
 IES80 -----
 CTG4797 -----
 IES77b -----
 CTG826 TTTT**CA**AA**AT**T**G**AC**AT**TT**CTA**-----T**TT**TAT**AA**TTGGAT**TTTGC**TAT**G**AA**TTTT**G**AA**TAT
 IES132 TTT-----
 CTG7743 -----TTAG**T**ATAT
 CTG43276 TTTT**TT**AA**T**TT**G**ACAA**ATA**-TTTT**CC**AT**TC**AT**G**AT**CT**AT**TG**TAT**TAT**TTGGAT**TTGG**TAT**G**AA**TTTT**TAG**AA**TAT
 IES42b -----
 IES35 -----ATTGGAT**ATAT**AT**GT**GA**ATTT**TAG**AT**AT
 IES104 TTTT**CA**AA**TAA**T**G**AA**CA**ATA-TTTT**TT**C-----AT**TC**GA**TT**-TTAT**AA**TTGGAT**GTTGG**AA**TGA**AT**CTT**TT**AA**TAT
 IES76 TTTT**CA**AA**AT**T**G**AC**AT**T**ATA**-TTTT**TT**C-----AT**TT**AA**TT**-TTAT**TT**T**G**AA**AT**T**GT**AT**TA**-
 CTG13940 -----
 IES42 TTTT**T**--AA**AT**T**G**ACAA**TA**-TT**AT**TT**C**-----T**AT**CC**AT**TT**G**TT**ACT**AT**TAG**AT**GTTACT**AT**CA**AT**TT**TAG**AA**TAT
 CTG34100 TTTT**CA**AA**AT**T**G**ACAA**AT**TTTT**TT**CC**A**-----
 IES169 TTTT**TT**-AA**AT**T**CA**AA**AT**TTTT**TT**TT**C**-----A**AT**CA**AT**T**G**TT**AT**T**TGG**AT**GTTGG**TAT**G**AA**TTTT**TAG**AA**A**AT**
 IES103 TTTT--AA**AT**T**G**ACAA**TA**--TT**TT**TT**C**-----AT**TC**AA**TTG**CTAT**TAT**TTGGAT**GTTGG**TAT**AA**AT**TTA**AA**AT**AT
 CTG2630 **GT**TT**TT**-AA**AT**T**G**ACAA**AT**--
 CTG45590 TTTT**TT**TA**AT**T**AA**CA**AA**ATA--A**TT**TT**C**-----A**TT**CA**AT**T**G**TAT**TAT**TTGGAT**GTTT**G**TAT**TT**T**TAG**AA**TAT
AnchoisB 1851 TTTT**CA**AA**AT**T**G**ACAA**ATA**-TTTT**TT**TT**C**-----A**TT**CA**AT**T**G**TAT**TAT**TTGGAT**GTTGG**TAT**G**AA**TTTT**TAG**AA**TAT

CTG36069 -----
 IES85 -CA**AA**CT**T**TAT**TT**CA**TTG**TAA**ATA**TT**CT**AT**C**AT**TT**CA**TAT**TT**G**AA**TG**TAA**A**-TAG**AA**ACT**CC**AG**CT**TT**CA**A-----C**TT**TT**AT**
 IES57 -----
 IES214 **AA**AA**AT**CA**TACT**CA**TTG**CA**AA**TA**AT**TT**CT**AT**TAT**AT**C**ATA**AT**TA**AA**T**G**TAA**A**-TAG**AA**ACT**CA**AG**CT**CA**ACT**TT**CT**CT**CT**
 IES105 -CA**AC**CT**TAT**TT**TG**CA**AG**TAA**TT**CT**AT**T**G**TT**CT**TT**CA**TT**TA**A-----A-**TT**G**AA**-C-----C**TT**CT**CT**AT
 IES47 -----CT**AT**T**ACT**TT**CA**AA**AT**TT**G**AT**G**TAA**A**-**TC**G**AA**G**CTC**TAG**GT**TT**CA**AA**TT**CT**CT**CT**CT**
 IES80 -----
 CTG4797 -----
 IES77b -----
 CTG826 -----
 IES132 -----
 CTG7743 -G**AA**AT**CT**TAT**TT**TAT**TG**CA**AA**TA**CT**AT**TAT**TT**CT**ATA**AT**TT**A**-T**G**TAA**AT**T**G**CA**ACT**CC**AG**CT**TT**CA**ACT**TT**CT**CT**CT**
 CTG43276 -G**AG**AT**CT**TAT**TT**A**ATT**G**CA**AA**TA**AT**CT**AT**TAT**TT**CT**ATA**AT**TT**AA**T**G**TAA**A**-TAG**AT**CT**CC**AG**CA**TT**AA**CT**TT**CT**CT**CT
 IES42b -----
 IES35 -CA**AA**CT**T**TAT**TT**TAT**TG**CA**AA**TA**AT**TT**T**-TT**AT**TT**CT**ATA**AT**TT**AA**T**G**TAA**A**-TAG**AA**ACT**CC**AG**AA**TT**CA**AA**TT**CT**CT**CT**CT**
 IES104 -G**AA**AT**CT**TAT**TT**A**TT**T**CA**AA**TAT**CT**CT**TT**AT**TT**CT**ATA**AT**TA**AA**T**A**TAA**A**-A**GA**AA**ACT**TC**AG**CT**TT**CA**ACT**TT**TT**CT**TT**
 IES76 --A**AT**TT**T**AT**T**-A**TT**CA**AA**TA**AT**TT**CT**AT**A**AT**TT**CA**TAT**TT**AA**T**G**TAA**A**-TAG**GA**ACT**CC**ACT**TT**GA**ACT**TT**CT**CT**CT**
 CTG13940 -----
 IES42 -G**AA**AT**CT**TAT**T**A**ATT**G**T**AA**ATA**AT**CT**AT**TAT**TT**AA**TA**AT**A**TT**TT**G**TAA**A**-TAG**AA**ACT**CC**AG**CA**TT**CA**ACT**TT**CT**CT**CT**CT**
 CTG34100 -**TTT**AA**TT**AT**TT**TA**AT**G**CA**AA**TA**AT**TT**CT**AT**A**AT**TT**CT**ATA**AT**TT**AA**T**G**TAA**A**-TAG**AA**ACT**CC**AG**CT**TT**CA**AA**TT**CT**CT**CT**TT**
 IES169 -G-**A**AT**CT**TAT**TT**TAT**TG**-AA**TA**AG**CT**AT**TAT**TT**CT**ATA**AT**TT**AA**T**G**AA**A**-A**AG**GA**ACT**TC**AG**CT**TT**CA**ACT**TT**CT**CT**CT**
 IES103 -G**AA**AT**CT**TAT**TT**A**TT**G**CA**AA**TA**AT**CT**AT**TAT**TT**T**ATA**AT**TT**AA**AG**T**AA**A**-TAG**AA**ACT**CC**AG**CT**TT**CA**AA**TT**CT**CT**CT**CT**
 CTG2630 -AA**AT**CA**TAT**TT**T**T**TG**CA**AA**TA**AT**TT**CT**AT**TAT**TT**CT**ATA**AT**TT**CA**AA**CT**AA**TG**TAA**A**-TAG**AA**ACT**CC**AG**CT**TT**CA**AA**TT**CT**CT**CT**CT**
 CTG45590 -G**AA**AT**TT**TAT**TT**TAT**TG**CA-----T**AT**ACT**TT**CT**ATA**AT**TT**AA**TG**CA**AA**-TAG**AA**ACT**AT**CA**AG**CT**TT**CA**ACT**TT**CT**CT**CT**
AnchoisB 1922 -G**AA**AT**CT**TAT**TT**A**TT**G**CA**AA**TA**AT**CT**AT**TAT**TT**CT**ATA**AT**TT**AA**T**G**TAA**A**-TAG**AA**ACT**CC**AG**CT**TT**CA**ACT**TT**CT**CT**CT**CT**

CTG36069 -----
 IES85 GTAATAGTATTATTACTATAGCAGGCCCGACATTTAAAAATAAATAAGATATGCAAACAATGATGACTGTCCATAA
 IES57 -----
 IES214 GTAATAATATTATT-GTTATAGTAGGCCCTTACATGTAAAFCAGATTGTTT-----A
 IES105 ATAA-AATATATTTCGCTATA--GGCCTTACTTAATAAATACATATATAAATATAGATGCAATGATCAATACCAATAA
 IES47 GAAATAATATTATTTGCTGTCGTAGGCCCTTACACTTAACTACATAATGTAGATGCACATGAAAGATGACTGTCACTAA
 IES80 -----
 CTG4797 -----TAGCTGGCCTTACACTTAACTACATTATGTAGATGATATGAATGACGACTGTCAATAA
 IES77b -----
 CTG826 -----
 IES132 -----
 CTG7743 GTAATGATATTATTTGCTATAGCAGGCCCTTGCATTAACCTTCATTAAATAGACATGCACACAGAGATGACTATCAATAA
 CTG43276 GTAATAATATTCTTTGCTATAGCAGGCC-TACACTTAAATAACATAATGTAGACATACATGCAATAATGACTGTGCATAA
 IES42b -----
 IES35 GAAGTAATATTATTTGCTATAGTAGGCCCTTACACTTCAACTACATTATGTAGACATATTTGCAATTATAACTGTCAATAA
 IES104 ATAAAGAAATTTTGGCTGTAGTAGGCCCTTACACTTAACTCAAAATCTGTAGACATACATTAACAATGATGACTGCCAATAA
 IES76 TTAATAATATTTTTGC AATAGCAG-CCTTATGTTTAACTACAAATGTAGACCTAAATGCAATGATGACTGTCAATAA
 CTG13940 -----
 IES42 GTAATAATTACTTTGATATA-CAGGTCTTACACTTTGTTTACATTATGTAGATATACATGCAATGA---CTGTCAATAA
 CTG34100 GTAATAATATTATTTGCTATAGCAGGCC-----
 IES169 GTAATAATATTCTTTGCTATAGCAGGCCCTTAACTTAACTTACATTATGTAGACATACATGTAATGATGCTTCTTCTATAA
 IES103 GTAATAATATTCTTTGCTATAGCAGGCCCTTAACTTAACTTACATTATTTAGACATACATGCAATGATAATGTGCAATAA
 CTG2630 GTTATCATATTCTTTGCTATAGCAGTTCCTTACGCTTAAAGCTACGTTATATAGACATACATGATATGATGATGTGCAATAA
 CTG45590 GTAATAATATTCTTTGCTATAGCAGGCCCTTAACTTAACTTACATTATGTAGACTTACATGCAATGATGACTGTCAATAA
AnchoisB 2000 GTAATAATATTATTTGCTATAGCAGGCCCTTACACTTAACTACATTATGTAGACATACATGCAATGATGACTGTCAATAA

CTG36069 -----GA-----
 IES85 TATAGTTAA--ACTATGTATATGAAAAACGA---TTTTCT-TCAAAA--AACAGA-AAATTCAGAGTTGATAACT
 IES57 -----
 IES214 TGGTATCAA--ACCTATGTGTATGAAAAAGA---TTTTCC-TCCTAAACAAAAAGC-AGATGCAGGATTTGATTACT
 IES105 ATTTATTAA--ATCTATATGTACGAAATAAAAAA---TTTTCA-TCAAAAATAA-CAGG-AAATGATGAAATGATTACC
 IES47 ATTTATTAA--ATCTATGCGTATGTAGAAAAAGA---TTTT-----AACGGC-ACATGCAGTAATGATTACT
 IES80 -----
 CTG4797 -----
 IES77b TTTTATTAA--ATCTATGTGTATAAAGAAAAA---TTTTCA-TCAAAACAACTAGC-AATTACAAGAATTGATTATT
 CTG826 -----
 IES132 -----
 CTG7743 TTGTATTAA--ATCTAATTGAATGAAAGAAA---TTTTAG-CCAAAACAAAACA--ATATGCATGAATTCATTCT
 CTG43276 TTTTATTAA--CAAATGTGTATGAAAAAAGA---TTTTCA-TCAAAA-CAACAGC-AACTGCAGGAATTGATTACT
 IES42b -----
 IES35 TTTTATTAA--ACCTATGCGCAAAAAAACA---TTTTCA-TCAAAGCATAGCAGC-AATTCAGGAA-----
 IES104 CTTTATTAA--ACCTATGCGGATGAAAAAAGA---TTTTTA-TCAAAACAAAACAGC-AATTCGATTAATTCATTACT
 IES76 TTTTATTAA--ACCTATG---TGAAAAGAAAAAACCCTTTTCA-TC-AAACAAAACAGC-AATTCAGGAGTTGATTACT
 CTG13940 -----
 IES42 TTTTGTAA--ACCTATGTGTATGAAAAACAAAAGATTTA-TCAAAACAAAACAGC-AATTCAGGAATTGATTACT
 CTG34100 TTTTATTAA--ATCTAATGTATGAAAAAAGA-TTTTCAAAAATAATACAGC-AATTCAGGAATTGATTACT
 IES169 TTTTATTAA--ATCTAATGTATGAAAAAAGA-TTTTCAAAAATAATACAGC-AATTCAGGAATTGATTACT
 IES103 TTTTATTAA--ACCTATGCGTGTATGAAAAAAGA---TTTTCA-TCAAAACAAAACAGC-AATTCAGGAATTGATTACT
 CTG2630 TTTTATTAA--ACCTATGCGGATGAAAAAAGA---TTTTTA-TCAAAACAAAACAGC-AATTCGATTAATTCATTACT
 CTG45590 TTTTATTAA--ACCTATATGAATG-AAAAAGAAATA-TTTTCA-TCAAAACGAACAGC-AAT-----TTGATTGAT
AnchoisB 2080 TTTTATTAA--ACCTATGTGTATGAAAAAAGA---TTTTCA-TCAAAACAAAACAGC-AATTCAGGAATTGATTACT

CTG36069 -----ATTATATA-----
 IES85 TTCTATGACGC---CATAAATAACTAG-CAAAA-TTATAAAT--AATAAGGGATGTAATACTAAGAAAA---GTTTGGT
 IES57 -----
 IES214 TTGGATAATGCACTTAAAACTATATAG-CAAA-TTTATAAAC--AATAAGGAAGTACCCTGAGAAAAA-G-ATTCACT
 IES105 TTGTATATTAACCTT-AAATTATATAC-CAAAAATTAGAAA--GTAAAGGGAAGAAACCTAC-
 IES47 TTGGATGATGCAAAAT-AAATTATATAG-TAAAACTTATAAA--AACAAAGAAAGAAAGCCTTAGAAAAAGCATTAAACA
 IES80 -----
 CTG4797 -----
 IES77b TTGGATGTTGAGCCTAAAATTA-----TAAAAA-----AAAAGGAATGAGACTCTAAGATAAAGG-----
 CTG826 -----AAAAATTAACAAC-AAAAGGGAAGAAAATGAGAGAAAAAACTACCAA
 IES132 -----CAAAAATAAAAT
 CTG7743 TTGGATGATGCACTTAAAAATAAATACTCAAAAATCTAAAC-AAAAGGGAAGAAAACCTAAGAAAAAAG-ATAAACA
 CTG43276 TAGGATGATGTGCTTAAAAATATAT-----AAAAATAAATAA--AAAAGGTAATAAAGGCTA-----ATTGACA
 IES42b -----
 IES35 -----GAAGAAACCTAAGAAAAAAG-ATTAACA
 IES104 TTGGATGATGCGCTTAAAAATTAAC TAG-CAAAAATTATAAACAAAAAGGGAAGAAAGCGCTAAGAAAAA-G-ATGAACA
 IES76 TTGGATGATACGCTTAAAAATATATAG-CAAAA-TTATAAAC-A-----ATTAA-A
 CTG13940 -----
 IES42 TTGGATGATGCGCTTAAAAATATATAC-CAAAAATTATAAAC-AAAAGGGA-----AAAAG-ATTT-CA
 CTG34100 TTGGATAACGGCCTT-AAATTATA---GCAAAAATATAAAC-AAAAGGGAAGAAAACCTAAGAAAAAATA-GTTAAATA
 IES169 TTGGATGATGAGC-TAAAAATATATAG-CAAAATTTATAAAC--AAAAGGGAAGAAACGATAAATAAAGATTAAACA
 IES103 TTAGACGATGAGCTT-AAATTATATAG-CAAAATTTCTAATC-AAAAGGGAAGAAAATGCTAAGAAAAAAGATTAAACA
 CTG2630 TTTTATGATACCTTAAAAATATATAG-CAAAAATTATAAAC-AAAAGGATGAAACGCTAAGAAAAA-G-ATTAACA
 CTG45590 TTGGATAATGAGCTTAAAAATATATAG-CAAAATTTATAAAC--ATAAGGGAAGAAACCTTAAAGAAAAAAG-ATTAAC-
AnchoisB 2155 TTGGATGATGCGCTTAAAAATATATAG-CAAAAATTATAAAC-AAAAGGGAAGAAACGCTAAGAAAAAAG-ATTAACA

CTG36069 -----
IES85 AACCTAAGAGAGTAAATATA-TTTATATC-TAAGTAAATTCAGTTAAATGTAAATFGATTAGCCCTTTAAACTCCTAA
IES57 -----TCTCAATC-----
IES214 AACCCAAGAGAGCAAATATA-TTTAAATCTTAACTAAATTTTCAAGATAAAAGTAAATAGGTTTAGAGTTAGGAACCTTCAA
IES105 -----TTAAAT-----
IES47 -----ATA-TTAAATCTTAAATAACTTTCAAGTTTAGGCAAATATTTTAGAATTCAGGAACCTTCTAT
IES80 -----
CTG4797 -----
IES77b --ATTAAAAAGTAAAGTAAA-TTTAAATCTTAACTAGCTCTCAAATTCAAATTAATTTGCTTAAAGATTAAGAACTTTTAT
CTG826 AACCTAAGATACCGAATATA-TTTAAATCTTAACTTCAAGCCAAAGTAAATTAATTCAGGATTAGAAACTTCTAT
IES132 -----
CTG7743 AATCTAACAGAGCAAATATATTTAAATCATATCGAAGCTTTAAATTTAAAATAAATCGCTTCAGAATTAAGAACTTCTAT
CTG43276 AGCCTAAGTGAAGCAAATATA-TTTAAATCTTAACTTCCAGTCAAAGTAAATTTGCTTAAAGATTAGGAATTTCTAT
IES42b -----
IES35 AACCTAGGAGAGAAAATATA-TTTAAATCTAACTAACTTTCAAGTAAAGTAAATCGCTTCAGAATTAGGAACCTTCTAT
IES104 AACCTAAGAGAGCAAATATA-TTTAAATTTTAACTAAATTTTAAATTAAGTAAAGTTGCTTAAAGATTAAGAACTTCTAT
IES76 TACCTAAGAGAGCAAATATA-TGCCAATCTTAAATTAAGTTTCAAGTTAAAGTAAATTTGCTTCAGAATTAGGAACCTTCTAT
CTG13940 -----
IES42 AACCTA----AGCAAATATA-TTTAAATCTTAACTAACTTTCAAGTAAAGTAAATTTGCAACGAATTAAGGAACCTTCTAT
CTG34100 AACCTAAAAGAA-AAATATATTTTAAATCACTAACTAAATTCAGT----TAAATTTGCTTTAGATTTAGGAATTTCTAT
IES169 AACCTAAGAGAGCGAATATC-TTTAAATCTTAACTAACTCTCTTTGTTAAAGTAAATTTGCTTACGAATTAGGAACCTTCTAT
IES103 AACCTAAAAGAGCAAATATA-TTAAATATTAACCTAACTTTCAAGTAAAGTAAATTTCTTAAAGAACTTTGGGAACCTCTAA
CTG2630 AACCTAAGAGAGCAAATATA-TT-AAATCTTAACTAACTTTAAAGTTAAAGTAAATTTGCTTACGAATTAGGAACCTTCTAT
CTG45590 AATAAAGATAGCAAATATA-TTT-AATCTTAACTAACTTTCAAATTAAGTAAATTTCTATCAGAATTAGGAACCTTCTAT
AnchoisB 2231 AACCTAAGAGAGCAAATATA-TTTAAATCTTAACTAACTTTCAAGTAAAGTAAATTTGCTTAAAGATTAGGAACCTTCTAT

CTG36069 -----
IES85 AAAACCTG-CAATTT-AGCTGGATATTTAGGAATTTCAATTTGGAAGGACTAAATATCTAT-AAAATTAATTTCTATAGTA
IES57 -----
IES214 -----TGATTTTGGTAGGATATTTGGAGTCTTAATTA-----AAAAGTAAAGTTAGAGATTA
IES105 -----CAAAATTTACAAAGATATTTGGAAATTTCAATTTGGAATAGGCTAAATATATAT- --AAGTAAATTTGAGAGTA
IES47 AAAACCTA-TCATTTTGCAGGATATTTGAGGAATGTCATTTGGAAGGCG-CAATATAAAT-AAAAGAACGTTCTAGATA
IES80 -----GT-----
CTG4797 -----
IES77b AAAACTTG-CAATTT-AGCAGGATACTTAGGAATTTCACTTCAAAGGGCTAAATATCTCT-AAAAGCAATTTCAAGAGTA
CTG826 AAAACCTGCAATATTTGGCAGAAATATTTAGGATTTTCAAATAGGAGGGCTAAATATATAT-AAAAGTAAAGTTCCAGAGTA
IES132 -----
CTG7743 AAAACCTG-TAATTTCTGCAGGATA-TTAGGAATTTCAATTTGAAATGCTAAACATCTAT- --AAAATAAGTTCCGAGAGTA
CTG43276 AAAACCTT-CAACTTTAGTAGGATATTTGGAAATTTCAAATGGAAGGGCTAAATATCTCT-AAAAGTAAATTTCAAGAGTA
IES42b -----
IES35 AAAACATG-CAATTTTAGTAGGATACTAAGGAATTTCAATTTTAAGTTGCTAAATTTCTAT-AAAAGTAAAGTTCCGAGAGTA
IES104 AAAAACCTGCAATTTTAGCAGGATAAAAAGGATTTCAATTTGGAAGGCTAAATATCTCT-AAAATAAGTTGAGAGTA
IES76 A-AACCTG-CAAAATTTAGCAGAAATAGTTAAGAATTTCAATTTGGAAGG-CTAAATATCTATAAAAAGTTAGTTCAAGATCT
CTG13940 -----
IES42 ATAACCTG-CAATTTTAGCAGGATATTT--GAGTTTCAATTTGGAAGGGCTAAATATCTCT-AAGAGCAAGTTCCGAGAGTA
CTG34100 AAAACCTGAAAATTTTAGCAGAAATATTTAGGAATTTCAATTTGGAAGGAGGCTAAATAGCTAT-
IES169 AAAACCTG-CAATTTTAGCAGGATATATAGTAATTTCAATTTGGAAGGACTAAATATTTCT-AAAAGAAAGTTCCGAGAGTA
IES103 AAAACCTG-AAATTTCACTAGGATATTTAGGAATTTCAATTTGGAAGGGCTAAATATCTT- --AAGGTAAGTTCTAGAGTA
CTG2630 A-----
CTG45590 AAAACATG-CAATTTTAGCAGGATATTTAGGAATTTTAATTTGGAAGGGCTAAATATCTCT-AAAAGTAAAGTTCCGAAGCA
AnchoisB 2310 AAAACCTG-CAATTTTAGCAGGATATTTAGGAATTTCAATTTGGAAGGGCTAAATATCTAT-AAAAGTAAAGTTCCGAGAGTA

CTG36069 -----
IES85 TCCCTCATTCTCT-----AATTTACTTTTTTATTT-GATA-----AATAGCACAAATATGGATTTCGA-ATTT
IES57 -----
IES214 TCCCTATTCTCTGAGTCGAT-AACTTA-TTTTTCATCT-AAAG-----AATACTACAAATATGGATTGAATCATT
IES105 TCCCGAATCTCTGAGTCAAC-----ATAGAACAAATTAAGAAATAAAACCTG
IES47 CCCAGGTTCTTTGAGTCAAT-AATTTGCATTT-CATTTGATG-----AATAGCATGAATTAAGGATAGAAAATTTG
IES80 TTCCGATTCTCTGAGTTAAC-GAG-TGCTTTTTCATTT-GATG-----AATAGCATAAATATGGATTGGAAAATTT
CTG4797 -----
IES77b TCCCGATTCTCTGTG-----AATAGCAAAAATATGGATTGTAAAATTC
CTG826 TCCAGATTCTCTGATTTCAAT-AATTTGCTTTT-CATTT-GATG-----TATAGCACATG-----
IES132 -----
CTG7743 TCCCAATTTCTCTGATTTCAAC-GATTTGCTTTTTTCAATTT-TATG-----AATAGCATAA-----ATTT
CTG43276 T-----GGATTCTCACTCAAT-AATTTGCTTTATCATTT-GATG-----AATAGCACAAATATGGATTGAAAATA
IES42b -----
IES35 TCCCGATCTCTAAGTCAAT-AATTTGCTTTTACAGTT-GATG-----AATAGTGCAGTTATGAGTTGAAA--TTT
IES104 TGCCGATTCTCTGAGTCAAT-AATTTGTTTTTTCATTT-GATTT-----TAATAGCACAAATATGGATTGAAA-ATTT
IES76 CCC--ATCCTCAGAGTCAAT-AATTTGCTTTTTTCAATTT-TATG-----AATAGCACAAATATGAATTTGAAAATTT
CTG13940 -----
IES42 TCCCGATTCTCTGAGTCAAT-AATTTGCTTTTTAATTT-GATG-----AATAACACAGATTATTTGATTGAAAATTT
CTG34100 -----
IES169 TCCCGATTCTCTGAGTCAAT-AATTTGCTTTTTTCAATTT-AATG-----AATAGCATAAATATGGATCCAAAGATTT
IES103 TCCCGCTTTCTCTGAGTCAATAAATTTGCTTTTTTATTT-GAAG-----AATAGCTCAAATATGGATCGGAAAATTT
CTG2630 -----
CTG45590 TCCCGATT---TGAGTCAAT-AATTTGCTTTTTTCAATTT-GATGATTTGATAAATAGAAC-AATATGGATTGAAAATTT
AnchoisB 2388 TCCCGATTCTCTGAGTCAAT-AATTTGCTTTTTTCAATTT-GATG-----AATAGCACAAATATGGATTGAAAATTT

CTG36069 -----
 IES85 **CTAGCTTTAGATAATGTTGCACCTTGGG---TGTAAAACAAATATAATCAGAATTCA-TTGTAAATTTTTCACATAAAT**
 IES57 -----
 IES214 GTAGCATAAGATA**GTGTAA**CGCAATTGA**AC**AGTCAAAA**CA**AAATATAT**AA**AGAATTC**GT**TTATAAAATTTT**AA**TATTAATC
 IES105 **ATAGACTAA**TTAATTT**AC**ACAAT**TT**GCAGCA-TG-AAAA--**AA**T**CA**AG**AA**AG-ATT**CA**-TTGT**TA**ATTTT**AA**TATTAATA
 IES47 **GTAGTCTA**AGAT**GAT**GTTGCACACT**TT**GAGCAGTGC**AAA**ACA**TAT**GGATT**GAA**ATT**CA**-TG**GT**AAATTT-CATATTAATA
 IES80 **GTAGT**TTAAGATAATGTTGCACACT**TT**GAGCAGTGC**AAAA**T-AATATATTA**GAA**ATT**CG**-TTGTAAATTTT**CA**AATTAATA
 CTG4797 -----
 IES77b **GTAGCATA**AGATAATGTTGCACACT-----**AA**GAATTC**G**-TTGT**GA**ATTTTCATAT**TAGCA**
 CTG826 -----**TA**GAATTC**A**-TTGT**AA**-----**TT**CATAT**TAA**-----
 IES132 -----
 CTG7743 **TTACT**TTAAGATAAT**GTC**GTACACT**TT**GAGCAG**AGCT**ATACAAATATATTAAGAATT**CA**-**TAGTAT**ATTTTCATAT**GA**ATC
 CTG43276 **GTAGCT**TAAGATA**AG**TTGCACACT**TT**GAGCAGTGC**AAAA**T**AA**ATA**CT**GT**AA**T**AA**A**TCA**-TT**G**AAAAATTTTCAT**TT**TCATC
 IES42b -----
 IES35 **TCAGCT**TA**TA**ATAATGTTGCACACT**TT**GAG**TAG**TGC**AA**-ACAATATAT**AA**GT**AT**TT**CA**-TTGTAAATTTTCATATTAATC
 IES104 **TTAGCT**TAAG**TTA**ATG**T**CGCACACT**TT**GAG**CA**AT**G**AAAA**CA**AA-----**TA**GAAT**TG**-TTGTAAATTTT**TC**ACA-----
 IES76 **GTA**ACTTAAGATA**CGT**AGCACACT**CGA**ACAGT**G**-**GAA**CAAAATATATTAAGAATT**CA**-TTGT-**AA**TTTT**CA**AATTAAT
 CTG13940 -----
 IES42 **GTAGT**T-----**TG**TTGCACAT**CT**GA**ACA**TT**G**CAAAA**TAA**ATATATTAAGAATT**CA**-TTGTAAATTTTCATATTAATC
 CTG34100 -----
 IES169 **TTAGT**TT**AA**AA**TGAT**CTGCACACT**TT**GAGCAGTGC**AA**-----**AA**TAT**GT**TTAG**A**ATT**CA**-**TAG**TAAATTTTCATATTAAT
 IES103 **GTAGC**ATAAG**TTA**ATG**TTA**CACACT**TT**GAG**CA**AT**G**-----**AT**TAAGAATT**CA**-TTGTAAATTT-CATATTAATC
 CTG2630 -----
 CTG45590 **GTA**ACTTAAGATAATGTTGCACACT**TT**GAGCAGTGC**G**AAA**T**-AATATATTAAGAATT**CA**-TTGTAAATTT**CC**CATATTA--**T**
AnchoisB 2458 **GTAGCT**TAAGATAATGTTGCACACT**TT**GAGCAGTGC**AAAA**CAAAATATATTAAGAATT**CA**-TTGTAAATTTTCATATTAATC

CTG36069 ----**A**-----**CA**ACTGCAATTT**CAT**AG**TTTT**TTTT**AT**GGTT**TA**AGCAACT**TT**GGGTTGTATA**ATT**ATCGCTTACT**TAGT**
 IES85 **AATAA**-----**CA**ACTGCAATTT**TA**AT**AG**CC**TTTT**TAGT**GA**TT**TA**AG**AA**ACT**TT**AG**CT**GCATACTTATCGCTTACT**TTG**-
 IES57 -----
 IES214 **AATAA**-----**CA**ACTG**CA**TTT**CAT**TC**G**-TTTT**TT**AGT**CA**TT**TA**AG**CA**ACT**TT**GGGTTGTATA**TT**GATGGCTTACT**TAA**-
 IES105 **AATAA**-----**AA**ACT**ACA**ATT**GT**AT**TC**AT**CT**TTTT**TA**TTGGTT**TA**GG**AA**ACT**TT**GGGTTGTATA**TTA**ATCGCT**AA**TT**TAG**
 IES47 **AAATA**-----**ACA**ACTGCAATTT**AA**TAT**CT**CAT**TT**AGT**AG**TT**TA**AG**TA**ACT**AC**GGTTGTATACTTAT**AG**TTACT**TAA**-
 IES80 **AATAA**-----**CA**AT**TT**AA**TT**CCAT**TCA**-TTTT**TT**CA**AT**GGTT**TA**AG**CA**ACT**TT**AGTTGTATACT**AA**T**TG**CTTACT**TAG**-
 CTG4797 -----
 IES77b **AATAA**-----**CA**ACTGCAATTT**TAT**T**CA**-TTTT**TT**AGT**GT**TT**CA**AA**CA**ACT**TT**GGGTTGTATA**TTT**AT**AC**TTACT**TAG**-
 CTG826 -----**CA**ATTT**TAT**T**CA**-TTTT**TT**AGT**TG**TT**AA**AG**CA**ACT**TT**GGGTT**TT**CTACTTATCGCTTACT**TAG**-
 IES132 -----
 CTG7743 **AATAA**-----**CA**ACTGCAAT**AT**CT**TT**CAT**ATT**GT**TAG**TGG-**GTA**AG**G**ACT**TT**GGGTT**GC**ATAC**AT**ACT**CA**CTT**AG**-
 CTG43276 **AATAA**-----**CA**AG**T**GCAATTT**CAT**TA**AT**TT**CT**TAGT**CG**TT**TA**G-----
 IES42b -----
 IES35 **AATAA****CA**AT**TG**CAAT**TG**CAATTT**CAT**CT**TTTT**TTTT**AG**TGGT**ATA**AG**GA**ACT**TT**GGA**TTGT**-----
 IES104 -----
 IES76 **TATAA**-----**CA**AT**TG**CCATTT**AA**TT**CA**CT**TTTT**TTAGTGGTT**TA**AG**CA**AA**TT**GGGTTGTATACTTAT**TG**TT**AT**T**G**T**AG**-
 CTG13940 -----
 IES42 **AATAA**-----**CA**ACTGCAATTT**CAT**TA**A**-TTTT**TT**AGTGG**CT**TAAG**CA**ACT**TT**GGGTT**AT**TT**TG**CTTAT**TG**CTTACT**TAG**-
 CTG34100 -----
 IES169 -----**CA**ATTT**CAT**TCATTT**TT**TTAGGGTT**AA**AG**TA**ACT**TT**GGGTT**AT**ATACTTATCGCTTACT**TAG**-
 IES103 **AATAA**-----**CA**ACT**TCA**ATTT**CA**-**AA**ATTT**TT**TTAGTGGTT**TA**AG**AC**ACT**TT**GT**TT**ATATA**TT**TAT**AC**TTACT**TAAGT**
 CTG2630 -----
 CTG45590 **AATAA**-----**CA**ACTGCAATTT**CAT**TA**A**-TTTT**TT**AGTGGTT**TA**AG**CA**ACT**TT**GGGTT**AT**ATA**ATT**ATCGCTTACT**TAG**-
AnchoisB 2537 **AATAA**-----**CA**ACTGCAATTT**CAT**TCATTT**TT**TTAGTGGTT**TA**AG**CA**ACT**TT**GGGTTGTATACTTATCGCTTACT**TAG**-

CTG36069 **TTG**TTT**AT**TT**GG**AGT**TA**AAA**CC**--**AA**TGCT**AT**TTAGAA**AG**TT**GAT**TT**GAG**TT**TG**CAAA**ATA**ATTA**ACTA**AT**CT**TT**TA**
 IES85 **TTG**CTTT**AA**TTTT**TA**-AT**CT**CA**AA**CA-**AA**AT**GA**ACT**TT**G**AG**TT**TA**GA**AG**ATTT**TA**ATTT**G**CAAA**ATA**ATTA**ACT**AC**CA**CT**TA**
 IES57 -----
 IES214 **TTGA**TT**TA**ATTT**GT**AAA**ACT**CA**AA**CC-**AA**ATG**CT**CTTTAGAA**AG**T**GT**TTT**GA**ATTT**ACA**-**AA**TAATTA**ACTA**AT**CG**T**CTA**
 IES105 **TTG**CTTT**AA**TTTT**TA**AT**CT**CA**AA**CC**AA**AA**TT**CT**TT**TAGAA**AG**AG**A**-**TT**G**AT**TT**G**CAAA**ATA**AT**TAA**-TACT**GT**TT**CTA**
 IES47 **TTGA**ATTAATTT-**AA**AT**TT**CA**AG**CC-**AA**ATG**CT**CTTT**CA**AA**AG**AGATTT**GA**AT**TC**G**CA**AA**ATA**AT**T**-**G**CTACT**AT**TT**TA**
 IES80 **TTA**CTTT**G**ATTT**TA**AT**CT**CA**AA**TC-**AA**CT**TG**CTTT**AA**AT**AG**-AGATTT**GA**ATTT**G**CAAA**ATA**ATTA**ACTA**AT**CT**---**A**
 CTG4797 -----
 IES77b **TAG**CA**TTA**ATTT**AA**TAT**CT**TA**AA**TT-**AA**AT**CT**CTTTAGAA**AG**AT**AG**TT**TGA**TT**TT**GG**AA**ATA**AT**TA**ACT**ACT**CT**TT**CTA**
 CTG826 **TCG**CTTT**AA**CT**TTA**AT**CT**CA**AA**CC-**AA**AT**CT**CTTTAGAA**AG**AG**TT**TT**GA**ATTT**G**TA**AA**ATA**AT**TA**ACT**ACT**CT**TT**CTA**
 IES132 -----
 CTG7743 **TTG**CGTT**AT**TTTT**TA**AG**CT**CT**TA**ACC-**AA**ATG**CT**CTTTAGAA**AG**AGATTT**GA**ATTT**G**CAAA**ATA**ATTA**ACT**CT**CT**TT**CTA**
 CTG43276 -----
 IES42b -----
 IES35 -----
 IES104 -----
 IES76 **TTG**T**G**TT**AA**TTTT**AA**AT**CT**CA**AA**CC--**AA**ATG**CT**G**TG**TA**GA**AA**AG**AGATTT**GA**ATTT**G**CAAA**ATA**AT--**CT**AC**CA**CT**CT**-
 CTG13940 -----
 IES42 **TTGA**TT**AA**TTTT**AA**AT**CA**CA**AA**CC**AA**AA**TG**CT**CT**TTAGAA**AG**AGATTT**GA**ATTT**ACA**AA**ATA**ATTT**AC**CA**CT**CT**CT**CA**A**
 CTG34100 -----
 IES169 **TTG**CA**TTA**ATTT**TA**AT**CT**CA**AA**CA-**AA**AT**GT**CTTTAGAA**AG**AGATTT**GA**ATTT**G**CAAA**ATA**AG**TT**AT--**CT**CT**CT**CTA
 IES103 **TTG**CGTT**TA**TTTT**AA**AT**CT**CA**AA**CC-**AA**GC**CT**CTTTAGAA**AG**AGATTT**GA**ATTT**G**CAAA**ATA**ATTT**ACT**ACT**CT**TT**CTA**
 CTG2630 -----
 CTG45590 **TTA**CGTT**AA**TTTT**TA**AT**CT**CA**AG**CC**AA**AA**ACT**CT**CT**TTAGAA**AG**AGATTT**GA**ATTT**ACA**AA**ATA**ATTT**ACT**ACT**CT**TT**CTA**
AnchoisB 2610 **TTG**CTTT**AA**TTTT**AA**AT**CT**CA**AA**CC-**AA**ATG**CT**CTTTAGAA**AG**AGATTT**GA**ATTT**G**CAAA**ATA**ATTA**ACT**ACT**CT**TT**CTA**

CTG36069 AGTTAAAAATCAAAA-ATTACTTTAC--GATAAATATACTTTGGGAGAAAFTTAAA-----TGCT--CAAAA-
 IES85 AGTACAAAATAAAA-ATTAGTCTTCATTGATGAAGGTAGCCTTTGAGAAAACCTAAA-ACCTGGAGGACATGGC-AAAA
 IES57 -----
 IES214 AATTCAAAATTATAA-ATTAACTCTATTAAAGAATACAACCTTTCTGAGAACTTTAAGAGCTGGACGATGTGCC--AAA
 IES105 AGTTAAAAATGATAA-ATTAGCCTACATTGATGAATGTAGC-----
 IES47 AGTTCATATTAATAA-ATTAGTCTGCATTGATGAATCTTGCTTT-GGAGAACTTTAA-AGTTGGACGATGTTAGC-AAAG
 IES80 AGTTAAAAATTAATAA-ATTAGTCTACATTGATGAATGTAATTTTGGAGAACTTACA-AGCAGGACGATGCTGGCAAAAA
 CTG4797 -----
 IES77b AGTTTAAATTAATAA-ATTAGTCTACATTGATGAATTCAGCTTTTGGAGAACTT-AA-AGCTGGATGATGCTTGC-AAAA
 CTG826 ATTTCAAAATTAATAA-TTTAGTCTACATTGATGAATCTAATTTATTAGGAGAAACATAA-AGCTGGACGATG---GC-AAAA
 IES132 -----
 CTG7743 AGTTCAAAATTTAAACATTAGTCTACATTGATGAATGCAGCTTTGGGAGAACTTAAA-T-CTGGACGATGCTGGCAAAAA
 CTG43276 -----
 IES42b -----
 IES35 -----
 IES104 -----
 IES76 -----
 CTG13940 -----
 IES42 AGTAAAAATTAATAA-ATTAGTCTAATTGATGATGTAACCTTTAGGAGAAACATAAA-TGCAAGACGATGCTGGCAAAAT
 CTG34100 -----
 IES169 AGTT-ACATTAATAA-ATTAGTCTAATTATTATTA-----TGGGAGAACTTAAA-AGCTGGACGATGCTGGCAAAAA
 IES103 AGTTAAAAAT-AAA-ATTAGTCTACATTGATGAATTTAGCTTTGCGAGAACTTTAGA-AGCTGGACGATGCTGGCAAAAA
 CTG2630 -----
 CTG45590 AGTTAAAAAT-AAA-ATTAGTCTGATATTGATGAATGTAGCTTTGGGAGAACTTAAA-AGCTGGGCAATGATGGCAAAAA
AnchoisB 2689 AGTTAAAAATTAATAA-ATTAGTCTACATTGATGAATGTAGCTTTGGGAGAACTTAAA-AGCTGGACGATGCTGGCAAAAA

CTG36069 -----
 IES85 AACCAATAGT--TATCCATTATTATAAATAGAAATCG-AACTCCATAAAAA-GTAACTGTGTAAA---TGATGCTATAGGTT
 IES57 -----
 IES214 AAGAATATT--TATGCATCGCTGTAATAAAATCG-AATTCCTCAAAA--TAAATGTGTAAT---TGGTGCCATCTTTT
 IES105 -----
 IES47 AAGAATAGT--TATCCATTACT-TTAAACAAAATCG-AACTACTTAAAAA-AATAATGTGTAAT---TAGTGTATCGGTT
 IES80 ATGAA-AGT--TATCTATTGCTGTAAGTAAATCG-AGCTCATCAAGA-GTAA-----
 CTG4797 -----
 IES77b AAGAATATT--TATCCAATGGTGTAAATAAAATCGGAA-TCCTC-AAAA-GTAAATGTGGGAT---TGGTGCCATCTTTT
 CTG826 AAGAATATT--TATCCATTGCTATTAAATAAAATCG-AACTCCT-AAAAA-GTAAATGTGTAATTGGTGGTGTACTGTT
 IES132 -----
 CTG7743 AAGAATATT--TAACAATTGCTGTAATAAAATCG-AACTCCTTAAAAA-TTAAATGTAGAAT---TGGTCAATCTTTT
 CTG43276 -----
 IES42b -----
 IES35 -----
 IES104 TAGT--TACCCCTACCGTAAATAAAATCG-AACTCTTCAAAA-GTAAATGCGTAA--T---TGGTGTATCTGTT
 IES104 TAGAATGGT--TATCCATTGCTGTAATAAAATCA-AACTCCTCAAAAAAGTATATATGCAAT---TGGTACCAATGTT
 IES76 -----
 CTG13940 AAGAATAGT--TACCCATTCTGTAATAAAATTCG-AACTCCTTAAAAA-GTAAATGCGTAAA---TGGTACCATCTGTT
 IES42 -----
 CTG34100 AA-AATAAT--TATCCATTGCTGTAATAAAATCG-AACTCCTCAAGA-GTAAATATGTATA---T-ATGATATCTGTT
 IES169 -----
 IES103 ATGAATAGTTATATCCATTGCTGTAATAAAATCG-AACTCCTCAAAA-TTATAGGTGTGAA---TGGAGCTAATCTGTT
 CTG2630 AATAATAGT--TATCAATTGCTGTAATGAAGTCC-----ATCTGTT
 CTG45590 AAGAATAAT--TATCCATTGCTGTAATAAAATCGAAACTCCTCGAAAA-GTAAATGTGTAAT---TGGTACTATCTGTT
AnchoisB 2767 AAGAATAGT--TATCTATTGCTGTAAT-AAATCG-AACTCCTCAAAA-TGTAAGGATAAA---TGGTAAATATCGTT

CTG36069 -----
 IES85 CTTAC--TGGTTTTATG-GCTTATAAATCGCTAATTTGGAAATGTAATCAATAGGTA----TCTGGAGAACCTTTGGCTTG
 IES57 -----
 IES214 GTGAT--AGGTTTATTGAT-ATAAATGTGTTATCTGAAATGTAAAACAATAGGTA----CTTTGGGAATTTTGAATG
 IES105 -----
 IES47 TTGAT--GGAATTATT--TTTATAAATTTGTTATCGGAATGTGAAAACACTAGGTA----TTT--AGAATCTTGAATG
 IES80 -----
 CTG4797 -----
 IES77b GTGAT--GGATTTTAT-TCTAATAAGTGTGTTATCGGAAATGTAATTAATAGGTA----TTTGGAAAATTTTGAATG
 CTG826 GTGAT--GGGTTTATT-GCTTATAAATGTGTTATAGGAAATGTAATTAATCTGCATTTTFTTTGGAGAATTTTGAATG
 IES132 -----
 CTG7743 GTGAT--TGGTTTATT-TCTTATCAATTTCTTTTCGGATACGTAATTAATTTGGGA----GTTGGAGAA-TTTTGAATG
 CTG43276 -----
 IES42b -----
 IES35 -----
 IES104 GTGAT--GGATTTTATT-GATTATAAATGTGTTATCGGAAATGTAATCAATATA-A-----TTTGGAGAATTTTGAATG
 IES76 -----
 CTG13940 -----
 IES42 -----
 CTG34100 -----
 IES169 -----
 IES103 -----
 CTG2630 -----
 CTG45590 -----
AnchoisB 2840 GTTATGGGGTTAATT-ACTTATAAATGCTTTATCGGAAATGTAATCAATAGGTA----TTTGAAGAATTTTGAATC

CTG36069 -----TCCATCCA
 IES85 AACCAATT--AAGTGTGCTTTGGCAA--AGTACT-GAAGATAA-TAAATATAC-TTAGTGTGGATAATACCTCCATCCA
 IES57 -----
 IES214 AACTTTT--AAAGCTGCTTTAGCAA--AGTAAT-GAAAAAAATAACTTTT-GC-TTAGTGTGGATAATGCCTCCATCCA
 IES105 -----
 IES47 AATTTAT--AAAGCTGCTTTAGCAA--AATAAA-GAAGACAA-TAATTTT-GC-TTATCGCTTGATATGCGCTCCACCCA
 IES80 AACTTTT--AAAGTGTGCTTTGGCAA--AATAAA-GAAGAAAA-TAATTTT-----GTTCA
 CTG4797 AACTTTT--AAAGCGGCTTTAGAA-----
 IES77b AACGTTT--AAAGCTGCTTTAGCAA--AGTAA--AAAAGAAA-TAATTTTTT-C-TTAGTGTGGATFGTGCCTCCATCCA
 CTG826 AATTTT--TAATCTG--TTAGCAA--AATAGCGAAGCTAAA-TAATTTTTTCC-TTGGTGTGGATATATGC-----
 IES132 -----
 CTG7743 TTCTTTT--AAGGCTGC-TTAGCAA--AATAAT-GAAGGAAA-TAATTTTTGT-TTAATGTGCTATAATGCTTTCATCCA
 CTG43276 -----
 IES42b AACTTTTAAAAGTTTCTTTTGGCAA--AACAAAT-GAA-AAAA-TACTATATGCTTAAAT-CTGGA-AATTCCTCCATCCA
 IES35 AACTTTA--AAAG-----GAAG--A--AATAAT-GTGGAAAA-TAATTTTTTGC-TAAGCCTGGATAATGCCTCCATCCA
 IES104 AACTTTT--AAAGCTGAATTTAGAAAATAATAAA-CAAAAAAA-TAATTTTTTGC--TTAGTGTGGATAATAT-TACATCTA
 IES76 AACTTTT--AAAGA-GCTTTAGCAA--AATAAT-GAAGAAAA-TAATTTTTT-GC-TTAG--AGGATAATGCCTTCATCCA
 CTG13940 -----
 IES42 AACTTTT--AAAGCTGCTTTAGCAA--AATAAT-AA-----AATTTTTTAC-TAAGTGTGCTGATAATTCCTCCATCCT
 CTG34100 -----
 IES169 AACTTTT--GAAGCTGCTTTTGGCAA--AATAAT-GACGAAAA-CAATTTTTTGC-TTAATGCATGTAAATGTCTCCATCCA
 IES103 AACTTTT--TAGCTGCTTTAGCAA--CATAAT-GAAGTAAA-TAATTTTTTACTTTAGTGTGGATAAT-TCTCCAT---
 CTG2630 AACTTTA-----AGCAA--AATAAT-GGAGAAAA-TAATTTTTT-C-TTAGTGTGGATAATGCCTCCATCCA
 CTG45590 TAAFTTC--AAAGCTGCTTTAGCAA--AATAAT-GAAGAAAA-TAATTTTTTGC-TTAGTGTGGATAATGCCTCCATCCG
AnchoisB 2912 AACTTTT--AAAGCTGCTTTAGCAA--AATAAT-GAAGAAAA-TAATTTTTTGC-TTAGTGTGGATAATGCCTCCATCCA

CTG36069 CTGGACATAT--AATCTGAA-TCAAATATCATCTGTAACTATTATTATCTTCC--CAATAGAGCCA--TCAG-CTTAA
 IES85 TTAGACACAATAAATCTGAA--CAATTTATCACTTGCTTATCATTATT--TTTGC-----TTAA-CTTAA
 IES57 -----TTTGT--TCTTCC-----
 IES214 ATAGACTCAATAATTTCTTAT-TGAGTTATCATTATTAATTTATTATT-T-TTCTTCTATATGCCC--TTAGCCTTAA
 IES105 -----TTAA-----
 IES47 CTATACATA-TAAATCTGAA-TTAATTATCATTGTTAATTATTATT-T-TCTTCTCCATATAACCC--TTAG-CTTAA
 IES80 CCTAATATAATAAATCTGAA-TCAATTATGATTTGTTAATTATTATT-TCTTCTCCAAATAGCCCCTTTAG-CTTAA
 CTG4797 -----TCATTTATCTCTTGTAACTATTAT-TCAACATCCAAATAGCCT--TTAG-CTTAA
 IES77b CCGAACATAATAAATTAATAA-TCAATTATCATTGTTAGTTTATT-TCTTCTCTATGTAGCCC--TTAG-CTTAA
 CTG826 ---AATATAAATATTCTGAGTCAATTATGATTTTAAATTAGTTATT-TCTTCTCCATCTAGCAC--TTTG-TTTAA
 IES132 -----
 CTG7743 CCATACATAATAAACTGAA-TCAATTATCATTGTTAATTATTATT-TCTTCTCCATAGAGTCC--TTAA-GTTA
 CTG43276 -----
 IES42b CCGAACATAATA-----AATTATATTGTTAATTATATT-TCTTCTCCATATACCC--TTAG-CTTAG
 IES35 TCTAACGTAATAAATCTGAA-TCAATTATCATGTGTTAATTATTATT-TTTCTCCATATAGCCC--TTAG-TTTAA
 IES104 AGAACATATTAATTTCTGAA-TTATTTATCATTGTTAAATATTATT-TCTTCTCCATATAGCCC--TTAG-CTTAA
 IES76 CTGAAATAATAAATCTGAA-TCAATTATCATTTTTAATTATTATT-TCTTCTCCATAGAGCCC--TTAA-CATAA
 CTG13940 -----
 IES42 TCAAACATAATA-GTCTGAA-TCAATTATCATTGTTAATTATTATT-TCTTCCCCATATAACCT--TTAA-CTTGA
 CTG34100 -----
 IES169 CCGAACATAATAAATCTGAA-TCAATTATCATTGGAATTATTATT-TCTACCTCCATATAGCCT--TTAG-TTTAA
 IES103 -----CAATACATCTGAA-TCAATTATCATTGTTAATTATTATT-TCTTCTCCAAATAGCCT--TTAG-CTTAA
 CTG2630 TCGAACATAA-----
 CTG45590 CAGATCGGAATAAATCTGAA-TCAATTATCATTCTTAATTATTATT-CCTTCTCTTATAGCCC--TTAG-CTTAA
AnchoisB 2985 CCGAACATAATAAATCTGAA-TCAATTATCATTGTTAATTATTATT-TCTTCTCCATATAGCCC--TTAG-CTTAA

CTG36069 CTGCATGTAAAGGCTTTGGGGAATTGCAAGTGATAGCTCTCTAAATATGTATGTTGCAA-----AAGTTCCTAA-GA
 IES85 CTGCATCAAAAGGTTATTTGGAATTGC-AAGCAACAGCCTTCCAAAATACATCTTACAT-----CAATTTATTCA-GA
 IES57 -----
 IES214 TTGCATAGAAAAGGCTGTGGGTAATTGCAAGCGATAGCTCTCTAAAATGTATGTTGCAA-----CAAGGCTTAAACA
 IES105 -----GGAGAAATTGCAAGCGAACTTCTTTAAATACCCATATTGCAA-----AAACGCCATAA--
 IES47 TTGAATCGAAATGCTGTGCGGAATTGCAAGAGATAGCTTCTTAAATACATATTGCAA-----CAACTGCC--
 IES80 ATGCATAGAAATGATGTG-AGAATGTCTAGCGATA--TCTCTAAAGAATCTATTGCAA-----CTACTGTCTAA-GA
 CTG4797 CAGCATCGAAAAGTGTGTTGGAATTACTAGCGATAGCTCTCTAAAATGCTAGTTGCAA-----CATCTGGGTAA-TA
 IES77b TTGCATCGAAATATATGGGTAATTGTTAAGCGATAGCTCTCTGAAATGCATATCGCAA-----CTACTACCTAA-GA
 CTG826 CTGTATCGAAAAGGTTGCGGAATTCAAGCCA-AGCTCTCTAAAATTCATGTTGCA-----CAACTGCCTAA-GA
 IES132 -----
 CTG7743 CTGCATAGGAAGGCTGCGGGAATTGCAAGCGATAGCTCTCTAAAATGAATGTTTAA-----CAATTACCTAA-GA
 CTG43276 -----
 IES42b CTGCATAGAAATCTGTGGGGAATTGTTAAATTGATAGCTCTCTAAAATGCATATTTCAA-----GTACTGCCAAA-GA
 IES35 TTGCATCGAATTAATTTGGAGAATTGCTA-----
 IES104 CTGCATCGAAATGTTTGGGGAATTGCTAAGTGATAGCTC-----
 IES76 CTGCATCGAAATGCTCTGGATAAATTGCTAGCGATAGCTC--TAAAATGCAAAATTGCAA-----CTACTGTCTAA-GA
 CTG13940 -----
 IES42 CTGCATCGAAATGCTGTGAGGAATTGCTAAGCGATAGCTCTCT-TAATGCATAGTGCAA-----CTACTACCAA-GA
 CTG34100 -----
 IES169 CCGCATCGAAA-----TGCTAAGCGATAGCTCTCTAAAATGCATAGTACAA-----CTATTACCTAA-GA
 IES103 CTGCATCGAAATGCTGTGGGGAATTGCTAAGCGATAGCTCCTTAAAATGCATAGTTCAA-----CTACTACCTAA-GA
 CTG2630 -----
 CTG45590 CTGCATCGCAATGCTGTGGGGAATTGCTAAGCGATAGCTCTCTAAAATGCATAGTGAACACTACTATCTACTACCTAA-GA
AnchoisB 3060 CTGCATCGAAATGCTGTGGGGAATTGCTAAGCGATAGCTCTCTAAAATGCATATTGCAA-----CTACTGCCTAA-GA

CTG36069 ATTTGATAATATAC-GTGTGTGCTAAACCCTATTACATCAACAAGCTTA----AAA-CAAATGGATTTCAAACCTAA
 IES85 ATTTTATAATACAC-ATGTCATGCTTAACTCTATTACATCAACTCTAGTTAAGTTCAAAAATCTGCAAAATCAAACCTAA
 IES57 -----
 IES214 ATTTTCATAACATAA-GTGTGTGCTTAACTTATATAA-----
 IES105 ATTTTATAAATTTACAAATGTTGTAAT-----
 IES47 -----
 IES80 ATTTTATAAATTTAA-ATGTTGAGCATAAECTCTATTACAACAACCTCAAGTTCA----AA-T-CATCTGCAATTCAAACCTAA
 CTG4797 ATTTTAT-ATATAC-ATATTGTGCTTAAATCTATTAAATCAACTTCAGTTTA----AAA-CATCTGCAATTCAAA-CTAA
 IES77b ATTTTATAATATAT-ATGTTGCGCTTAACTCTATTACAACAACCTCAAGTTCA----AAA-CATCTGCAATTCAAACCTAA
 CTG826 ATTTTCATAACATAC-GTGTGTGCTTAACTCTATTACATCAACTCAAGCTCA----GAA-AATCTGCAATTCAAAATCTAA
 IES132 -----
 CTG7743 ATTTTCATAATATTC-ATTTGTGCTTTACTCTATTACATCAACCCTCAAGTTCA----AA-----
 CTG43276 -----
 IES42b -TTTTATAATATAC-ATTTGCTCTTAACTCTATTATAAATAAAACAAGTTCA----AAA--ATCTAAACTTCAAACCTTA
 IES35 -----
 IES104 -----CTAA
 IES76 ATTTTATACTAAAC-AGTTGCGCTTAAATCTATTACAATAAATTCAGTTGA----AAA-CATCTGTACTTCACCCAA
 CTG13940 -----ATAATATAC-ATGTTGTGCTTAAATCTATTAAAAAECTCAAGTTCA----AA--CATCTGCAATTTAACCAA
 IES42 AGTTTA-AAATACAC-ATGTTGTGCTTAACTCTATTACAATAAECTCAAGTTAA----AAA-CATCTGCAAAATCAAACCTAA
 CTG34100 -----
 IES169 ATTTTATAATATAC-ATGTTGTGCTTAACTCTATTACAACAACCTCAAGCTCA----AAACCATCTCTACTTCAAATTTAA
 IES103 ATTTTATAATATAC-ATGTTGTGCTTAACTCTATTACAACAAGCTCAAGTTCA----AAA-AATCTGCAATTCAAAATCTAA
 CTG2630 -----
 CTG45590 GAAATAT-ATATAC-ATATTGTGCTTAACTCTATTACAACAACCTCAAGTTCA----AAA-CATCTGCAATTCAAAATCTAA
AnchoisB 3132 ATTTTATAATATAC-ATGTTGTGCTTAACTCTATTACAACAACCTCAAGTTCA----AAA-CATCTGCAATTCAAAACCTAA

CTG36069 AATTCCTAGAAGTTTGCTTGTACAAAAATAATCTGATGGTA-TAA-----TTTCATA
 IES85 A-TTCCTAGAACTTTCCTGTTACAAAAATAATCTGATG-AA-TTATATACAGTCTAATTTTAAATTAAGTATCACA
 IES57 -----
 IES214 -----GTTG-GACAAATAATCTGATGCTA-ATATATACAATTCAAATTTTAAATCAAATTTTCA
 IES105 -----
 IES47 -----
 IES80 AATTCCTAAAGCTTGTATTAC-AAAAATAATCTGATGCTA-TTATATACAATTTAAATTTTAAATATAAGTTTCAAT
 CTG4797 AATTCATAAAGCATGCTTGTACGAAAAATAATTTGATGCTA-TTGTATACAATTCAAATTTTAAATCTCAAATTTTCA
 IES77b AATT--AGA--TTGATTGTTAAGAAAAATAATCTGATGCTA-TTATATACAATTTAAATTTTAAATCAAATTTT-
 CTG826 AATTC-AAAACTTACTTATTA-AAAAATGATTTTGAACCTA-TTAGATACAGTCTGAAATTTTAAATCAAAGTTTCA
 IES132 -----
 CTG7743 -----CATATTACGAAAAATAATCTGATGTTA-TTAT-----
 CTG43276 -----TTTAGTATAAAGTTTAAAT
 IES42b AATTCCTAGATGATAGCTTATTACGAAAAATAATCTGATGCTA-TTA-----
 IES35 -----
 IES104 AATTCCTAGA-----
 IES76 AACACCTGGAAGTTTCTTGTAAAGAAAAATAATCTGATGCTA-TTATATACAATTCAAATTTTAAATATAAAGTTTCA
 CTG13940 A-TTCCTAGATGCTTGTATTGAAAAATAATTTGATGCTA-TTATATACAATTCAAATTTTAAATATAAAGTTTCA
 IES42 AATTCCTAGAAGTTGGCTTTTACGAAAAATAATCTGATGCTA-TTATATACAATTTAAATTTAATAAGTTTCAAT
 CTG34100 -----
 IES169 AATTCCTAGAAGCTTGTGTAC-AAAAATAATCTGATGCTA-TTATATACAATTTAAATTTTAAATATAAAGTTTCAAT
 IES103 AATTCCTAGAAGCTTACTT-TTAAAGAAAAATAATCTGATGCTA-TTATATACAATTTAAATTTTAAATATAAGTTTCAAT
 CTG2630 -----AACTCTGATGCTA-TTATATAGAATTTAAATTT-
 CTG45590 ACTTCCTGGAAGCTTGTGTTTCGAAAAATAATCTGATGCTA-TTATATACAATTTAAATTTTGAATAAAGTTTCAAT
AnchoisB 3206 AATTCCTAGAAGCTTGTGTACGAAAAATAATCTGATGCTA-TTATATACAATTTAAATTTTAAATATAAAGTTTCAAT

CTG36069 AGTAAATGAGCAA-AGGTGTCCTTTATTCTTAACAGTGATGGTGTAGCAATACATATTGTTAGTCTGTAAGTTTAA
 IES85 AGT-AAATGAGCAA-AGGTCTCTGATTTCTTCTAATAGTGATGGTGTAACTGCAGATTGGTATCTGGAAATGCTTAA
 IES57 -----
 IES214 -----
 IES105 AGTAAATGAGCAA-AGGTCTCC-----TCTCGAATAGCTATTTTATAGAACTGCAGATTGTTAGTCTGGAAATCTTT
 IES47 -----
 IES80 AGTAAATAGTAAA-AGTTCTCCGATTCTTTTGAAATGAGATGGTGTAGCAACTACAATTTGTTAGTCTGGAATGCTTTA
 CTG4797 AATAAATAATCGAA-ATTTCTCCGATTCTTTTCGAATAGGGATGTTGTAGCCACTGCAGATTCTTATCTGGAAATGCTTAA
 IES77b AATAAACGAAACAAA-AATTTCTCCATTTTTCGAATGGCT-----TAGCAGATTGTTAGTCTGGAAATGCTTTA
 CTG826 AATTAATAAACAAA-AGGTCTCTCTCTTTTCGAATAGCTATCTGTAGTAACTGTAATTTGTTAGTCTAGGAATGCTTTA
 IES132 -----
 CTG7743 -----
 CTG43276 AGTAAATGAGCAA-AGGTCTCCGATTCTTTTCGAATAGC-ATGGTGTAGCAACTGCAGCTCGTTATCTAGAAATGCTTTA
 IES42b -GTAATGAGCAA-ACGTTTCCGATTCTTTTC-----CACTGCAGTTTGTAGTCTGGAAATGCTTTA
 IES35 -----
 IES104 -----
 IES76 AGTAAATGAGCAA-ATGCTCCGATTCTTTTCGAATAGCGATGCTGTAGCAACTTTAGATTGTTAATCTAGAAATGCTTTA
 CTG13940 ACTAAATAGCAA--AAGCTCTCTATTTTTCGAATAGCCATGGTGTAGCAACTACAATTTGCTAGTATGGTATCTTTA
 IES42 TTT-AAATAGCAA-ATGCTCTAGATTCTTTTCGAATAGCGATGGCTGAGCAACTGCAGATTGTTAGTCTGGAAATCTTTCA
 CTG34100 -----
 IES169 TGTAATGAGCAAATAATCTCCAATTTCTTTTAATAATTTGAGTGTGTAACAACCTGCAGATTGTAAGTCTGGAAATGCTTTA
 IES103 AGTAAATAGCAA-AAGCTCCGATTCTTTCTTAATAGCGATGGCTGAGAACTGCAGATTGTTAGTCTGGAAATGCTTTA
 CTG2630 AGTAAATGAGCAA-AAGTCTCTTAAATAGTGTGATGAGTATCAACTGCAAAATTTAGTCTGGAAATGCTTTA
 CTG45590 AGTAAATGAGCAA-AGGTCTCCGATTCTTTTCGAATAGTGTGATGGTGTAGCAACT-----
AnchoisB 3285 AGTAAATGAGCAA-AGGTCTCCGATTCTTTTCGAATAGCGATGGTGTAGCAACTGCAGATTGTTAGTCTGGAAATGCTTTA

CTG36069 ACAC---CAAGCAGAAATTTATTCAAAGCAGAGCTTCAAATTTGGG-GACCGAAGGAGAGCTAAATCACTTACTCAAACATC
IES85 ACACTTTCAAGCAAAATTTTAGTCGAAGCAGAGTTTCAAATTTGGGGATAGAAAGGAGTTGAATCACTCACTCCTTAATC
IES57 -----
IES214 ---CTTTCAAACAGATCTTA-TCGAAGAGAGTTTTGAATTTGGGAAACAGAAAGTTAGGAAATCACTCTATCGTTAATC
IES105 ACACTTTCA---AGCACTTTCTAAATTTGGGGATTTGAAAGGTC-----
IES47 -----
IES80 ACACTTTCAAGCAGA-----GTTTCGAATTTGGGGAGCGGAAAGGGGGCTAAATCACTTCTCCTTAATC
CTG4797 ACCTTTCAAGCAGATTTAATCGAAGCAGAGTTTCGAATTTGGGACCCAAAGGGAGCTAAATCACTTCGCTCCTTAATC
IES77b ACAATTTCAAGCAGATTTTAGTCAAAGCAAAGTTTTGAATTCGTTGGACCGAAAGAGAGCTAAATCGCTCACTCCTTAAT
CTG826 AAC-TTCAAGCAGATTTTAGTCTAAGAAAGTTTTCTAACTGGAGGACTGAAAAGAACTA-----
IES132 -----
CTG7743 -----
CTG43276 ACACTTTCAAGCAGA-----GTTTCGAATTTGGG-GACCTAAAGGGAGCTAAATCACTCACTCCTTAATC
IES42b ACACTTTCAAGCAGATTTTAGTTCGAAGCAGAGTTTCAAATTTGGAGGAC-----CTAAATCACTCGCTCCTTAATC
IES35 -----GACCAAAGGAAACTA-----
IES104 -----AGATTTTATTCGAAGCAGAGTTTCGAATTCGGGGCACAGAAAGGA--CTAAATCACTCGCTCCTTAAT
IES76 ACACTTTCAAGCAGATTTTAGTCAAAGCAGAGTTTCGAATTTGGGACCCAAAGGGAG-TAAATTCGCTCACT-TTTGATA
CTG13940 ATATTTTCAAACAGATTTTAGTCAAAGTAGAGTTTCGAATTTGGGGATTCGAAGGGAACTAAATCACTCG-----C
IES42 ACAATTTCAAGCAGATTTTAGTCAAAGCAGAGTTTCGAATTTGGGGACAGAAAGGGAGCTGTTTCCT--GTCTCATTC
CTG34100 -----
IES169 ACACTTTCAAGCGATTTTAGTTGAAGCAGAGTTTCGAATTTGGGGACCGAAAG-GAGCTAAATCAGTCGCTCTTTAATC
IES103 ACCCATTTCAAGTAGAT-----TTTCGAATTTGGAGGACCTAAAGGGAGCTAAATCACTCGTTCATTAATC
CTG2630 ACCTTTCAAGCAGATTTTAGTCAAAGCAGAGTTTCGAATTTGGGGAAACAGAGAGTAAGCTAAATTCACCTCCTCCTAATC
CTG45590 -----GCAGATTTTAGTCAAAGCAGAGTTTCGAATTTGGGGACCGAAAGGGAGCTAAATCACTCGTCACTTAATC
AnchoisB 3364 ACACTTTCAAGCAGATTTTAGTCAAAGCAGAGTTTCGAATTTGGGGACCGAAAGGGAGCTAAATCACTCGCTCCTTAATC

CTG36069 TATCCAACC---AACTCTCAATATAACA-AGCCTTTCATTTTATTATATAG-TTTAATT--TTATAAAAAATAACATTATG
IES85 TACTGAGCCA--GCCACTTAGTATAAAACAGTCTTTCACCTTTATTTAT-G-TTTTTT-----AA-TAAAAATATG
IES57 -----
IES214 -----AAATCTCACTAGAAATA-AGCCTTTCATTTTATA-----G-TTTTTCTATTGTAAAAA---AAATTATG
IES105 -----
IES47 -----
IES80 TATCCAGTC---AACTCTCAATATAACT-AGCCTTTCGATTTTATTATATG-TTT-----
CTG4797 AATCCAGCC---AACTCTCAATATACAC-AGTCTTAATTTGTTATTAATAG--TGTTTATTATAACA-TAAAAATTATG
IES77b TCACCAGCC---AACTCTCAGTATACAG-AGCCGTCATTTTAAATTTATCGTTTTTTTGTATAT-AAAA-TAAATGATG
CTG826 -----ATCGTTCAATATAATA-AGCCTTTCATTTAT-----TTACAAAT---AAATTTTG
IES132 -----
CTG7743 -----
CTG43276 TATCCAGCT---AAATCTCAAGATAACA-AGCCTTTCATTTTATTATATAG--TTTTTGATTATAAAAA-TAAAAATTATG
IES42b TATCCAGCC---AACTCTCAATATAACA-CTTATTTTCATTTTATTATATAG-TTTTTTGATTATAAAAA-TAAAAATTATG
IES35 -----TATAACA-AGCCTC-----CGTTTTATTATAAAAA-GAAATTTATG
IES104 CATTCAGCCAAAACCTCAATATGACA-AGCCTTTCATTTTATTATATAGTTTTTTGATTATAAAAA-TAAAAATTATG
IES76 TATCCAGCA---AACTCTCAATATAA-A-ACCTCTTATTTTACTTATA--TTCTTTGATTATAAAAA---CAATTATG
CTG13940 TATCCAGTC---AACTTCTCAATATAAAA-TGGCTGTCATTTTATTATTTAA--TTTTTGATTATAAAAA-TAAAAATTATG
IES42 TATCCAGCC---AACTCTCAATATCATA-AGCCTTTCATTTTAAATTTATAG-TGTTTTGATTATAAAAA-TAAATTTAAG
CTG34100 -----
IES169 TATCCAGCC---AACTCTCAATATAACA-AGCCTTTCATTTTATTATATAG-TTTTTTGATTAT-AAAA-TAAATTTATG
IES103 TATCCAGC-----CAATTTAACA-AGCC-TTCATTTTATTATATAG-ATTTTTTATTATAAAAA-TAAAAATTATG
CTG2630 TATCCAGCA---AAATCTCAATATAACA-AGCCTTTCATTTCTATTTCTAG-TTTTTTGATTATAAAAA-TAAAAATTATG
CTG45590 TATCCAGCA---AACTCTCAATATAACA-AGCCTTTCATTTTATA-TTATAG-TTTTTTGATTATAAAAA-T-AAATTTAT
AnchoisB 3444 TATCCAGCC---AACTCTCAATATAACA-AGCCTTTCATTTTATTATATAG-TTTTTTGATTATAAAAA-TAAAAATTATG

CTG36069 GGTTTGTGTAATTCATATATAGATTATATGTAATAATAGATTAAAT-CTT-----ATAATAAAAATAATATCGAGAAGTCT
IES85 GGTTCGTGTGATTAATGATGATTATAAATAAATAATAGATTATGATTATGTCACGATAAAAATAATATAATAAAGTCT
IES57 -----AATCGATA-----TCT
IES214 -----TAGATATAAAAATAGATTTATAAATT-----ATFATAAAAATATATCAGGCAGTCT
IES105 AGTTTTTGTACACTTGAGTAATAATATAAAGTAGATGTAG-TTA-----ATAATAAAAATAATACAGTAGTTT
IES47 --TTTGTGTGATTCCTTTGTGATAATATATAAATAATAGATTAT-ATT-----ATAATAAAAATAATATCAGGAAGTCT
IES80 GGTTTGTGTTGATTCGTGATGATTATAT-----AAAATAGATTTA-----GAAACA---CAGGAAGTTT
CTG4797 AGTTTTGTGATTCATGAGTGAATATAAATAAATAGATTAT-ATT-----ATAAAAATAAATAATATCAGGAAGTCTG
IES77b GGTTTGTGATCTATGAGTGTTTTATAT-AAAATAGATTAT-CTAT-----CTTAAAGAAATAATATC--TAAGTTT
CTG826 GG-----GAGTAAATTATTTATAAATAATAGATTAT-ATT-----ATAAA--AAFTAATACAAAGAGTCT
IES132 -----
CTG7743 -----
CTG43276 GGTTTGTGATTAATGACTGATTAATATAAATAATCGATTAT-ATT-----ATGAAAGAAATAATATTAAGAAGTCT
IES42b GGTTTGTGCGATTCATGAGTGAATATATAAGAAATAGATTAT-TTT-----ATAAAAATAAATAATCAGGATTTT
IES35 GGTTTATGTGATACATGAGTGAATATTTAAAAATAGATTTTT-ATT-----ATAATAAAAATAATATCAGGAAGTCT
IES104 GGTTTGTGATATATGAGTGAATTCGATAGAAATAGATTAT-ATA-----ATFAAAGAAATAATATCAGGAAGTCT
IES76 GGTTTGTGATTCATGAGTGAATATAAATAAATAATAGATTAT-ATT-----CTAAAA-AAATAATATCAGGAATCT
CTG13940 GGTTTATGTGATTCAGAGTGAATATATAAATAATCAATTTAT-ATT-----ATAAAAATAAATAATATCAGGAAGTCT
IES42 GGTTTGTGCGATTCATGAGTGAATATAAATAAATAATCGATTAT-ATT-----ATA-ATGAAATAATATCAGGAAGTCT
CTG34100 -----
IES169 GGTTTAAGTGAATTCATGAGTGAATTTATAAATAATCGATTAT-ATT-----ATAAAGAAATAATATTAAGATG---
IES103 AGTTTATATGATTCATGAGTGAATTTATAAATAAATAATCGATTAT-ATT-----ATAAAAATAAATAATATCAGGAATCT
CTG2630 GGTTTGTGATTCATGAGTGAATATAAATAAATAATCGATTAT-ATT-----ATAAAAATAAATAATATCAGGATCT
CTG45590 GGTTTGTGATTCATGAGTGAATATAAATAAATAATCGATTAT-ATT-----TTAAAAGAAATAATATCAGGATGCT
AnchoisB 3518 GGTTTGTGATTCATGAGTGAATATAAATAAATAATAGATTAT-ATT-----ATAAAAATAAATAATATCAGGAAGTCT

CTG36069 GAAGAAGTATATTAAATCGTATTGGACTATA
 IES85 GAAGGAGTAGATGAAATTGTATTGGACGATA
 IES57 AATTAAAGGAGTCAAACCTTTAATTGA-----
 IES214 GAAGAAGT----GCCATTGTTTTGAACTATA
 IES105 GAAAAGTGTGTGAAATTTATTGGACTATA
 IES47 GAAGTAGTAGATAAAATTGAATTCAACTATA
 IES80 GAAGAAGTAGATGACATTGTTTGGACTATA
 CTG4797 GAAATAGTAGATGAAATTGCATTGGACTATA
 IES77b GAAAAGTAGATGAAATTTAATTGGTCTATA
 CTG826 TAAGAGGTAGATGAAATT-TATTGTA CTATA
 IES132 -----TAGATGAAATTGGATTGGACTATA
 CTG7743 -----
 CTG43276 ---GAAGTAGAT-AAACATAATTGGACTATA
 IES42b GAAGAAGTAGATGAAATTTATTGGACTATA
 IES35 GAAGAAATAGATGAAATTGTATTGGACTATA
 IES104 GA-GAAGTAGATGAAATTTATTAGACTATA
 IES76 GAAGAAGTAGATCAAATTTATTGGACTATA
 CTG13940 AGAGAAGTAGATAAAATTGTATTGGACTATA
 IES42 AAAGAAGTAGATAAAATTGTATTGGGCTATA
 CTG34100 --AAAGT-----
 IES169 GATGAAGTAGCTAAACCTGTATTGGACTATA
 IES103 GAAGAGGTAGATAAAACCTGTATTGGACTATA
 CTG2630 GAAGAAGTAGATAAAATTGTATTGGACTATA
 CTG45590 GAAGAAGTAGATAAAATTGTATTGGACTATA
AnchoisB 3591 GAAGAAGTAGATGAAATTGTATTGGACTATA

E	IES (ParameciumDB Accession)	IES Size (nt)	Element	Alignment Label	Alignment Length (nt)
	IESPGM.PTET51.1.98.309432	2003	A	IES98	1226
	IESPGM.PTET51.1.128.254421	3392	A	IES128	3394
	IESPGM.PTET51.1.77.209216	4154	A	IES77	3258
	IESPGM.PTET51.1.103.177611	2462	B	IES103	2464
	IESPGM.PTET51.1.104.49056	2238	B	IES104	2240
	IESPGM.PTET51.1.105.239361	2483	B	IES105	2295
	IESPGM.PTET51.1.132.167159	1500	B	IES132	1502
	IESPGM.PTET51.1.169.56908	3272	B	IES169	3274
	IESPGM.PTET51.1.214.11549	2317	B	IES214	2319
	IESPGM.PTET51.1.35.111752	2820	B	IES35	2766
	IESPGM.PTET51.1.42.397702	2473	B	IES42b	2262
	IESPGM.PTET51.1.42.72890	3389	B	IES42	3391
	IESPGM.PTET51.1.47.408041	2125	B	IES47	2127
	IESPGM.PTET51.1.57.48117	1257	B	IES57	1099
	IESPGM.PTET51.1.76.220822	3048	B	IES76	2890
	IESPGM.PTET51.1.77.311405	3470	B	IES77b	2755
	IESPGM.PTET51.1.80.84925	1513	B	IES80	1515
	IESPGM.PTET51.1.85.45587	3479	B	IES85	2959

IESs used to build the final *AnchoisA* and *AnchoisB* consensus sequences.