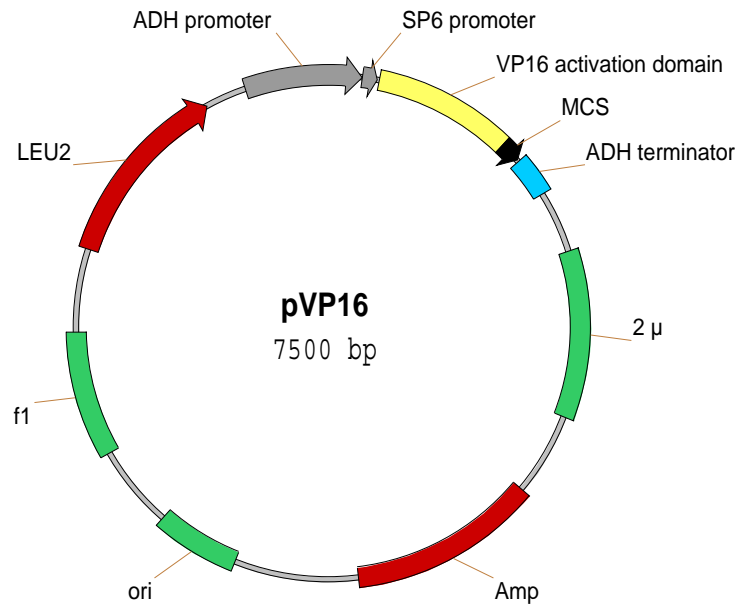
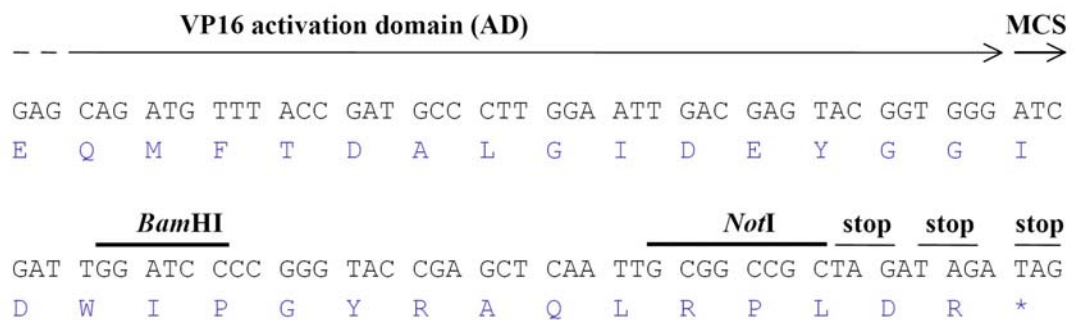


## 11 APPENDICES

### 11.1 Vector pVP16

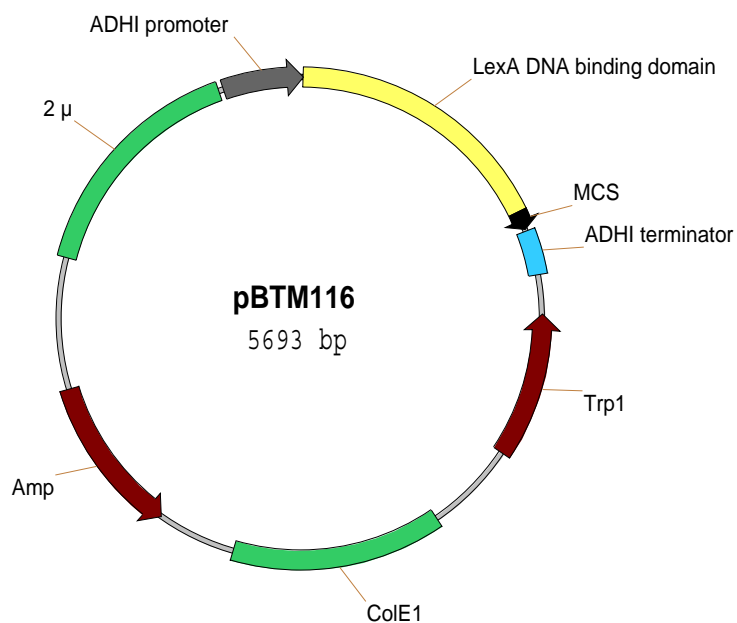


A: Schematic map of the pVP16 vector

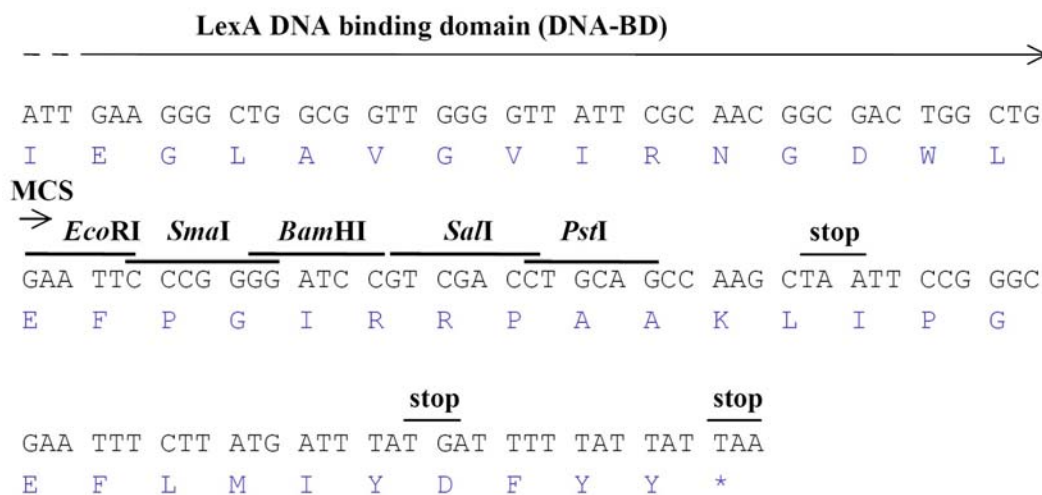


B: Multiple cloning site (MCS) of the pVP16 vector. Only unique restriction sites are marked. Nucleotide triplets are shown in frame together with the corresponding amino acids (blue letters). Stop codons are in all three frames.

## 11.2 Vector pBTM116

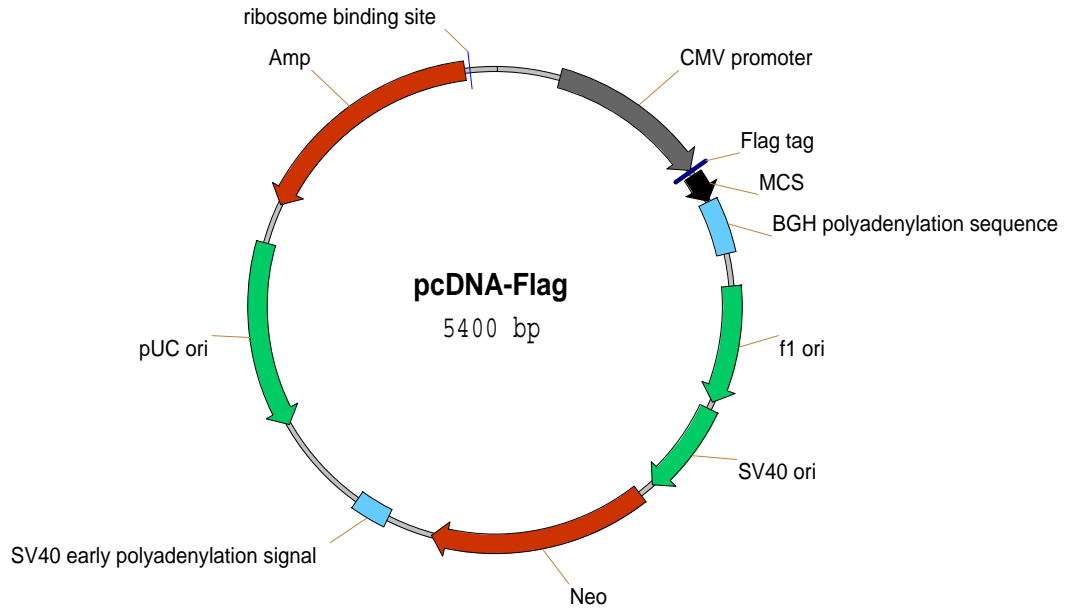


A: Schematic map of the pBTM116 vector

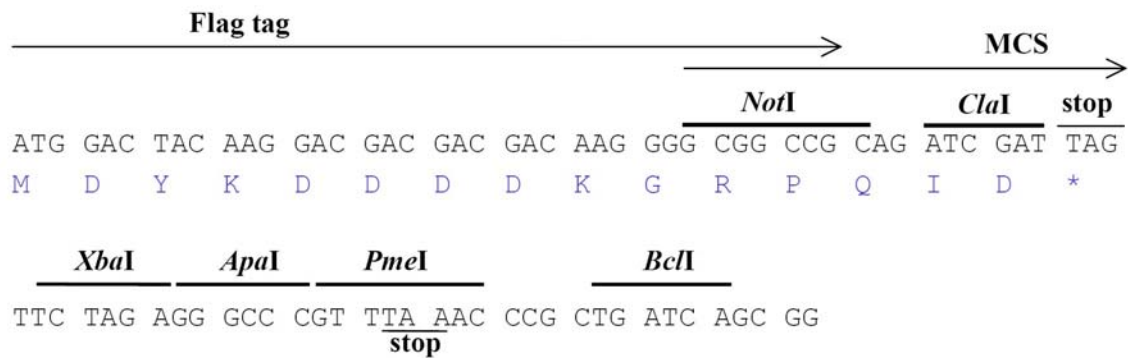


B: Multiple cloning site (MCS) of the pBTM116 vector. Nucleotide triplets are shown in frame together with the corresponding amino acids (blue letters). Stop codons are in all three frames.

### 11.3 Vector pcDNA-Flag

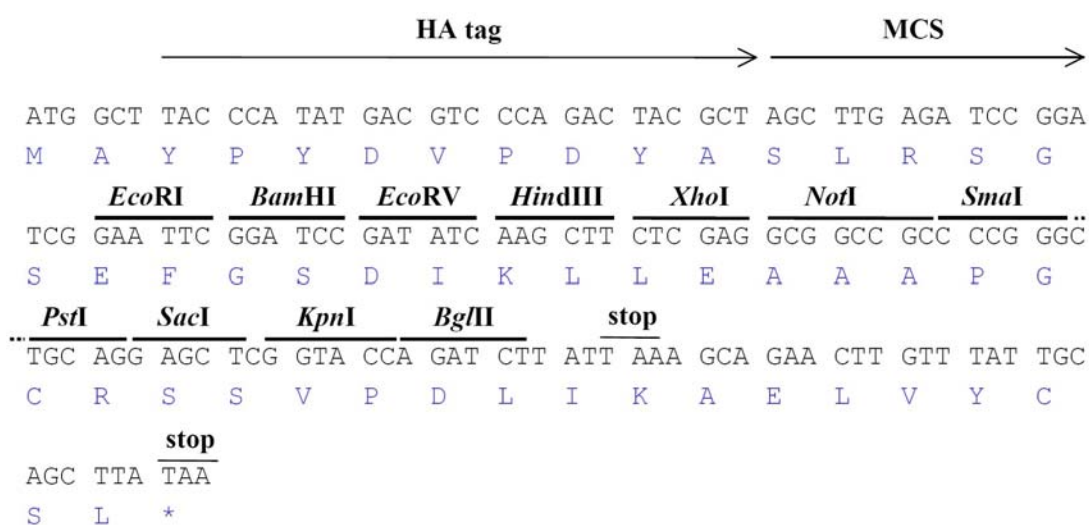


A: Schematic map of the pcDNA-Flag vector



B: Multiple cloning site (MCS) of the pcDNA-Flag vector. Nucleotide triplets are shown in frame together with the corresponding amino acids (blue letters).

## 11.4 Vector pTL1-HA2



A: Multiple cloning site (MCS) of the pTL1-HA2 vector. Only unique restriction sites are marked. Nucleotide triplets are shown in frame together with the corresponding amino acids (blue letters).

### 11.5 List of putative ESTs found on BAC RP11-538A12

EST ID (GeneBank)	Location on the BAC RP11-538A12	EST source	RT-PCR results after 70 cycles
AI075926	10898 – 11448 bp	testis	no product
AW850653	58673 – 59165 bp	colon	no product
BG980989	66265 – 66618 bp	colon	product obtained
BG980131	74910 – 75348 bp	colon	product obtained
BG979719	75540 – 75926 bp	colon	product obtained
BG979037	75530 – 75914 bp	colon	
BF815673	105008 – 105211 bp and 111435 – 111638 bp	colon	no product
AW858552	114764 – 115127 bp	colon	product obtained
AW858470	114891 – 115327 bp	colon	
AW167235	128523 – 127998 bp	uterus	no product
BE064736	131134 – 131587 bp	breast	product obtained
BE064727	131107 – 131587 bp	breast	
BE065063	131100 – 131723 bp	breast	
BE064976	131167 – 131664 bp	breast	

## 11.6 List of putative non-coding high homology regions (HHR) found after human-mouse sequence comparison

HHR no.	HHR location in human	Length of the HHR	Percent of identity	Expression in mouse E16.5
1.	28927 – 29114 bp	188 bp	83%	after 70 cycles
2.	29891 – 30288 bp	398 bp	90%	after 70 cycles
3.	30372 – 30603 bp	232 bp	81%	after 70 cycles
4.	30643– 30748 bp	106 bp	73%	no expression
5.	31141 – 31647 bp	507 bp	85%	after 70 cycles
6.	34556 – 34660 bp	105 bp	81%	no expression
7.	34741 – 34847 bp	107 bp	73%	no expression
8.	34954 – 35053 bp	100 bp	71%	no expression
9.	35681 – 36142 bp	462 bp	92%	after 35 cycles
10.	39320 – 39623 bp	304 bp	82%	after 70 cycles
11.	49103 – 49596 bp	494 bp	91%	after 70 cycles
12.	49684 – 49817 bp	134 bp	93%	after 70 cycles
13.	54194 – 54325 bp	132 bp	70%	after 70 cycles
14.	54693 – 54802 bp	110 bp	75%	after 70 cycles
15.	57843 – 58040 bp	198 bp	70%	after 70 cycles
16.	59793 – 60252 bp	460 bp	82%	after 70 cycles
17.	65075 – 65176 bp	102 bp	90%	after 70 cycles
18.	65190 – 65342 bp	153 bp	82%	after 70 cycles
19.	65918 – 66452 bp	535 bp	86%	after 70 cycles
20.	67322 – 67436 bp	115 bp	74%	after 70 cycles
21.	68498 – 68724 bp	227 bp	93%	after 70 cycles
22.	69476 – 69655 bp	190 bp	82%	after 70 cycles
23.	148938 – 149097 bp	160 bp	84%	after 70 cycles
24.	144670 – 144778 bp	109 bp	80%	after 70 cycles
25.	144541 – 144649 bp	109 bp	77%	no expression
26.	134716 – 143833 bp	118 bp	84%	after 70 cycles
27.	130849 – 130978 bp	130 bp	79%	after 70 cycles
28.	130226 – 130348 bp	123 bp	70%	after 70 cycles
29.	127646 – 127774 bp	129 bp	91%	after 70 cycles
30.	127366 – 127593 bp	228 bp	89%	after 70 cycles
31.	123720 – 123861 bp	142 bp	79%	no expression
32.	123186 – 123719 bp	534 bp	94%	no expression
33.	122697 – 122892 bp	196 bp	78%	after 70 cycles
34.	122291 – 122647 bp	357 bp	84%	after 70 cycles
35.	121787 – 122181 bp	395 bp	94%	after 70 cycles
36.	121468 – 121625 bp	158 bp	73%	no expression
37.	119922 – 120089 bp	168 bp	77%	no expression
38.	114460 – 114591 bp	132 bp	79%	no expression
39.	111467 – 115568 bp	102 bp	88%	no expression

Red letters indicate positions on the human BAC RP11-614N24 (GenBank accession number AC103916), whereas blue letters correspond to the positions on the breakpoint spanning BAC RP11-538A12 (GenBank acc. no. AC016761).

## 11.7 Alignment of *Peg10* and *Edr* nucleotide sequences

Comparison of *Peg10* (AB091827) and *Edr* (AJ006464) nucleotide sequences suggests that both of them correspond to the same gene. Identical residues are shown as white letters on the black background. Various translation start codons (according to GenBank data) as well as different length of repetitive sequences found in both entries are marked in red. Stop codons for ORF1 and ORF2 are marked in green.

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AJ006464 1 ---GAATTCTGCGGCCGCCGC--CCTGACCAACTACGACCTGGGGAGAGCAGCCAACCGAGAAGGTCCACCGAGCCT
AB091827 1 AACTTGAGTTGGTGTGTGTCTCAACAAATCCTGACCAACTACGACCTGGGGAGAGCAGCCAACCGAGAAGGTCCACCGAGCCT

AJ006464 75 CGCCTAGGTCTGCTGCGCGGGCTGCGGTCCGAGCCTTCTCCG-----CGGTCAACCCAGTGGACCGGGCCGTGCGGGAC
AB091827 81 CGCCTAGGTCTGCTGCGCGGGCTGCGGTCCGAGCCTTCTCCGACCGCGGTCAACCCAGTGGACCGGGCCGTGCGGGAC

AJ006464 150 CCCTCATCCTTCGTGGCATCGCAGAGGAATCCTCGTGTGGAACAGGCGGGTTTAAAGAACAAAAGACGCCAACACGAG
AB091827 161 CCCTCATCCTTCGTGGCATCGCAGAGGAATCCTCGTGTGGAACAGGCGGGTTTAAAGAACAAAAGACGCCAACACGAG

AJ006464 230 GGTCCCAGGATCCAGGGCTCCCTCCCAGGGGAGTGAAGCCCCTCTCACCGCAGCCATGGCTG-TGCGG-TGGTTCCTCC
AB091827 241 GGTCCCAGGATCCAGGGCTCCCTCCCAGGGGAGTGAAGCCCCTCTCACCGCAGCCATGGCTGCTGCTGCGGGTGGTTCCTCC

AJ006464 308 AACTGCCCGCCCCCTCCCCCTCCCCCTCCTCCAACAACAACAACAACAACAAC--CCAAAGAGCCAGGCGTGCCTGA
AB091827 321 AACTGCCCGCCCCCTCCCCCTCCCCCTCCTCCAACAACAACAACAACAACAACAACCCCAAGAGCCAGGCGTGCCTGA

AJ006464 385 CGCCGAAGATGATGATGAACGACGACACGATGAGCTCCCTGAAGACATCAACAACCTTTGACGAAGACATGAACAGGCAGT
AB091827 401 CGCCGAAGATGATGATGAACGACGACACGATGAGCTCCCTGAAGACATCAACAACCTTTGACGAAGACATGAACAGGCAGT

AJ006464 465 TTGAGAATATGAACCTGCTGGATCAGGTGGAGTTGCTTGACACAGAGCTACAGTCTGTGGATCATTTAGATGACTTTGAT
AB091827 481 TTGAGAATATGAACCTGCTGGATCAGGTGGAGTTGCTTGACACAGAGCTACAGTCTGTGGATCATTTAGATGACTTTGAT

AJ006464 545 GATGATGATGAAGACGATGACTTTGATCCAGAACCTGACCAGGATGAGCTCCCTGAGTACAGTGACGATGATGACCTGGA
AB091827 561 GATGATGATGAAGACGATGACTTTGATCCAGAACCTGACCAGGATGAGCTCCCTGAGTACAGTGACGATGATGACCTGGA

AJ006464 625 GCTTCAGGGTGTGTCAGCAGCCCCATCCCAAACTTTTCTCCGATGATGACTGCCTTGAAGACCTTCTGAGAAGTTCC
AB091827 641 GCTTCAGGGTGTGTCAGCAGCCCCATCCCAAACTTTTCTCCGATGATGACTGCCTTGAAGACCTTCTGAGAAGTTCC

AJ006464 705 ATGGCAACCCTGACATGCTGGTCCCTTTCATGTATCAGTGCCAGCTCTTCATGGAAAAGAGCACCAGAGATTTCTCAGTT
AB091827 721 ATGGCAACCCTGACATGCTGGTCCCTTTCATGTATCAGTGCCAGCTCTTCATGGAAAAGAGCACCAGAGATTTCTCAGTT

AJ006464 785 GACCGCATCCGTGTGTGCTTCGTGACAAGCATGCTGATCGGCCGTGCGGCCCGCTGGGCTACTGCCAAGCTGCAAAGATG
AB091827 801 GACCGCATCCGTGTGTGCTTCGTGACAAGCATGCTGATCGGCCGTGCGGCCCGCTGGGCTACTGCCAAGCTGCAAAGATG

AJ006464 865 TACTTACCTGATGCAACAACAACTAACACTGCCTTATGATGGAGCTGAAGCATGTCTTTGAAGACCTCAGAGACGTGAAG
AB091827 881 TACTTACCTGATGCA--CAACTA-CACTGCCTTTATGATGGAGCTGAAGCATGTCTTTGAAGACCTCAGAGACGTGAAG

AJ006464 945 CTGCCAAACGCAAGATCAGACGTCTGCGCCAGGGCCCTGGGCCTGTTGTGGACTACTCCAATGCATTCCAGATGATTGCC
AB091827 958 CTGCCAAACGCAAGATCAGACGTCTGCGCCAGGGCCCTGGGCCTGTTGTGGACTACTCCAATGCATTCCAGATGATTGCC

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AB091827 1038 CAGGACCTGGATTGGACTGAGCCTGCCCTGATGGATCAGTTCAGGAAGGTCTCAACCCAGACATTCGCGCAGAGCTGTC

AJ006464 1105 TCGCCAGGAGGCCCCAAGACCCTGGCTGCTCTGATTACTGCCTGTATTACATCGAGAGAAGGCTGGCTCGTGACGCTG  
AB091827 1118 TCGCCAGGAGGCCCCAAGACCCTGGCTGCTCTGATTACTGCCTGTATTACATCGAGAGAAGGCTGGCTCGTGACGCTG

AJ006464 1185 CTGCAAAGCCCGATCCTTCACCCAGAGCCTTGGTGATGCCTCCAAACAGCCAGACCATCCACCCAGCCTGTGGGAGGT  
AB091827 1198 CTGCAAAGCCCGATCCTTCACCCAGAGCCTTGGTGATGCCTCCAAACAGCCAGACCATCCACCCAGCCTGTGGGAGGT

AJ006464 1265 GCCCCGATGCGCCTGTCCAAGGAAGAAAAGGAGAGACGCCGCAAATGAATTTGTGTCTCTACTGTGGCAATGGAGGCCA  
AB091827 1278 GCCCCGATGCGCCTGTCCAAGGAAGAAAAGGAGAGACGCCGCAAATGAATTTGTGTCTCTACTGTGGCAATGGAGGCCA

AJ006464 1345 TTTTCGCCGACACGTGTCCAGCGAAAGCCTCCAAGAATTCGCCGCCGGGAAACTCCCCGCCCCGCTGTAGGGGACCTTC  
AB091827 1358 TTTTCGCCGACACGTGTCCAGCGAAAGCCTCCAAGAATTCGCCGCCGGGAAACTCCCCGCCCCGCTGTAGGGGACCTTC

AJ006464 1425 AGCGACAGGGCCAGAACGAATAAGGTCCCCACCCTCCGAGGCTTCGACTCAGCACCTGCAAGTGATGCTCCAGATTCATA  
AB091827 1438 AGCGACAGGGCCAGAACGAATAAGGTCCCCACCCTCCGAGGCTTCGACTCAGCACCTGCAAGTGATGCTCCAGATTCATA

AJ006464 1505 TGCCGGGCGAGACCCACCCTGTTGTGTCGAGCTATGATTGATTTCTGGTGCATCTGGCAACTTCATTGATCAAGACTTTGTC  
AB091827 1518 TGCCGGGCGAGACCCACCCTGTTGTGTCGAGCTATGATTGATTTCTGGTGCATCTGGCAACTTCATTGATCAAGACTTTGTC

AJ006464 1585 ATACAAAATGCAATTCCTCTCAGAATCAAAGACTGGCCAGTGATGGTGAAGCTATTGATGGGCATCCAATTGCCTCGGG  
AB091827 1598 ATACAAAATGCAATTCCTCTCAGAATCAAAGACTGGCCAGTGATGGTGAAGCTATTGATGGGCATCCAATTGCCTCGGG

AJ006464 1665 CCCAATCATTGAAACCCACCACCTGATAGTTGATCTGGGAGACCACCGTGAGATACTGTCAATTTGATGTGACTCAGT  
AB091827 1678 CCCAATCATTGAAACCCACCACCTGATAGTTGATCTGGGAGACCACCGTGAGATACTGTCAATTTGATGTGACTCAGT

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AB091827 1758 CTCCATTCTTTCCTATTGTCTAGGAATTCGTTGGCTGAGCACGCATGACCCTCACATTACCTGGAGTACCCGCTCCATT

AJ006464 1825 GTCTTCAACTCTGATTACTGCCGACTCTGCTGCCGATGTTTGCACAGATACCTTCTAACTTACTGTTTACAGCGCCACA  
AB091827 1838 GTCTTCAACTCTGATTACTGCCGACTCTGCTGCCGATGTTTGCACAGATACCTTCTAACTTACTGTTTACAGCGCCACA

AJ006464 1905 ACCGAGTTTCGCATCCGTATCTACTTTCATCATGTGCATCCGCATGTCCATCCGTCATATGCATCAGCATCTGCATCAGCATC  
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AJ006464 1985 TGCATCAGTTTCTGCATCCAGATCCGCATCAGTATCCGCATCCGGATCCGCATTATCATCATCATCAGCAGGCGGATATG  
AB091827 1998 TGCATCAGTTTCTGCATCCAGATCCGCATCAGTATCCGCATCCGGATCCGCATTATCATCATCATCAGCAGGCGGATATG

AJ006464 2065 CAGCACCAACTGCAGCAGTATCTATATCAGTATTTGTATTACCACCTGTATCCGGTTATGCACCACCATCTGCCTCCAGA  
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AJ006464 2625 **CTATATTCAGAATGTGTATACACCTGTGATGAGCATGTCTATCCGGGTCACCGGGTGGTTGACCCTAACATGAGATGA**  
 AB091827 2560 **CTATATTCAGAATGTGTATACACCTGTGATGAGCATGTCTATCCGGGTCACCGGGTGGTTGACCCTAACATGAGATGA**

AJ006464 2705 **TTCTTGAGCGCACAGCCTGCCAGTGGACATTTGTAATCAATGTCTGAGTCTGAAATGAATGCTCTGCGAAATTTCTGT**  
 AB091827 2640 **TTCTTGAGCGCACAGCCTGCCAGTGGACATTTGTAATCAATGTCTGAGTCTGAAATGAATGCTCTGCGAAATTTCTGT**

AJ006464 2785 **GACAGGAATGTTAAAGATGGGCTCATGACTCCCACTGTGGCGCCCAATGGAGCCCAAGTCTGCAAGTGAAAAGAGGGTG**  
 AB091827 2720 **GACAGGAATGTTAAAGATGGGCTCATGACTCCCACTGTGGCGCCCAATGGAGCCCAAGTCTGCAAGTGAAAAGAGGGTG**

AJ006464 2865 **GAAACTCCAAGTCACTTACAATTGCCGAGCTCCACAGAGTGGCACCATCCAAAATCAGTACCTACGCATGTCTCTCCAA**  
 AB091827 2800 **GAAACTCCAAGTCACTTACAATTGCCGAGCTCCACAGAGTGGCACCATCCAAAATCAGTACCTACGCATGTCTCTCCAA**

AJ006464 2945 **ATATGGGAGACCCTGCACACCTGGCAAGCTATGGTGAATTTGTCCAAGTTCCTGGCTACCCATATCCAGCCTATGTTTAC**  
 AB091827 2880 **ATATGGGAGACCCTGCACACCTGGCAAGCTATGGTGAATTTGTCCAAGTTCCTGGCTACCCATATCCAGCCTATGTTTAC**

AJ006464 3025 **TATACAAGCCCGCATATGATGACTGCGTGGTACCCAGTAGGACGAGATGTACATGGACGAATAATCGTTGTGCTGTGT**  
 AB091827 2960 **TATACAAGCCCGCATATGATGACTGCGTGGTACCCAGTAGGACGAGATGTACATGGACGAATAATCGTTGTGCTGTGT**

AJ006464 3105 **AATCACCTGGTCTCAAAATACGAACCGCCAGCCTCCGGTGCCCCAGTATCCTCCTCCGAGCCACCTCCACCACCACCAC**  
 AB091827 3040 **AATCACCTGGTCTCAAAATACGAACCGCCAGCCTCCGGTGCCCCAGTATCCTCCTCCGAGCCACCTCCACCACCACCAC**

AJ006464 3185 **CACCTCCACCGCCACCACCACCTCCACCAGCATCATCCTGCAGTGTGCGTAGAACCTGTATGTCTTTGTAGTCTCTG**  
 AB091827 3120 **CACCTCCACCGCCACCACCACCTCCACCAGCATCATCCTGCAGTGTGCGTAGAACCTGTATGTCTTTGTAGTCTCTG**

AJ006464 3265 **CCCTCAACTTGATCCTGTGCAGCTTCTCAATCTATGACTGTGTGGTACTGGACCTTCAGAGGCGCACAGAGCTCAAGTCA**  
 AB091827 3200 **CCCTCAACTTGATCCTGTGCAGCTTCTCAATCTATGACTGTGTGGTACTGGACCTTCAGAGGCGCACAGAGCTCAAGTCA**

AJ006464 3345 **GTTTTCGTCTTGACTGCCACTTTATAAGTTGACAGGCTGGGTTTTACTTGTAAAACTCTCACCATCTCAATCACAGG**  
 AB091827 3280 **GTTTTCGTCTTGACTGCCACTTTATAAGTTGACAGGCTGGGTTTTACTTGTAAAACTCTCACCATCTCAATCACAGG**

AJ006464 3425 **CTGCCAAGTGTCTTTACAAAGAAGCTGATACAAACACAGGCCATGCTGATTTCTTACAGAGGAGAGAGAGGAAAGAGAA**  
 AB091827 3360 **CTGCCAAGTGTCTTTACAAAGAAGCTGATACAAACACAGGCCATGCTGATTTCTTACAGAGGAGAGAGAGGAAAGAGAA**

AJ006464 3505 **GAAGAAAGAGGAGGAAGAGGACATGACTTGCCCATATGCTGGGCACCTTATAAAGGAAGCCAGACTTTTCGGTGCAGTAT**  
 AB091827 3440 **GAAGAAAGAGGAGGAAGAGGACATGACTTGCCCATATGCTGGGCACCTTATAAAGGAAGCCAGACTTTTCGGTGCAGTAT**

AJ006464 3585 **GGAAAGGCTTCCGTTGATTCTCTTGCTGCACCCACGAACTTCACCACCTTCAAACCTCATTTCACGGTTCGGTTAATT**  
 AB091827 3519 **GGAAAGGCTTCCGTTGATTCTCTTGCTGCACCCACGAACTTCACCACCTTCAAACCTCATTTCACGGTTCGGTTAATT**

AJ006464 3665 **TTCAAGGAGCAGCAACTCGACTGGTTCTCTGCTACATGAAACACCTCAGCTTGAAAAGGAAGTGCTCTCTCAGACTGACT**  
 AB091827 3599 **TTCAAGGAGCAGCAACTCGACTGGTTCTCTGCTACATGAAACACCTCAGCTTGAAAAGGAAGTGCTCTCTCAGACTGACT**

AJ006464 3745 TGTGAGTGTGCCTTCACATTCTGGTGCAAATCATGTGTACCCAAGAAGCTCTGACATAGCATCTTACCATCATCATGCCAG  
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AJ006464 3825 GAATTGGTTTCCTTAAAGTGTGACACTTGGCAACCAGAAGCGTCTGGTGGCTTCAGGTGTGTAGGGTTTTGTAGAAAGT  
AB091827 3759 GAATTGGTTTCCTTAAAGTGTGACACTTGGCAACCAGAAGCGTCTGGTGGCTTCAGGTGTGTAGGGTTTTGTAGAAAGT

AJ006464 3905 TGTAAACCACCTCTCAGTCATGCAAGAGGGTACATCAAAAAGACTTCTAAATTTGGTACCAGACTTTGACAAGAGCCTGT  
AB091827 3839 TGTAAACCACCTCTCAGTCATGCAAGAGGGTACATCAAAAAGACTTCTAAATTTGGTACCAGACTTTGACAAGAGCCTGT

AJ006464 3985 GAGTTAGTTCATTGTAACCAACTTGTGAGGAAGCTTCTAGCAAGAATTTTCATGAATGTTGTTAATTGGCTGGAGAAATACC  
AB091827 3919 GAGTTAGTTCATTGTAACCAACTTGTGAGGAAGCTTCTAGCAAGAATTTTCATGAATGTTGTTAATTGGCTGGAGAAATACC

AJ006464 4065 AGCAAAGTTTTGCAATCATCCACCCATTTGTCTGCCATTGTGCATCTGGACATCCATCAACCGCCCACTCAGTGGCATCT  
AB091827 3999 AGCAAAGTTTTGCAATCATCCACCCATTTGTCTGCCATTGTGCATCTGGACATCCATCAACCGCCCACTCAGTGGCATCT

AJ006464 4145 ACCATGAAGATGTTTAGAGACGGGAAATGATTTTGACCCAGATCCACACTCCTCTCATGTGAGATATTTGGAATTAGAG  
AB091827 4079 ACCATGAAGATGTTTAGAGACGGGAAATGATTTTGACCCAGATCCACACTCCTCTCATGTGAGATATTTGGAATTAGAG

AJ006464 4225 CACCGGGAATCGCTTGAAGATATGAACTTCTAAGAATGGAGTCTCTTGCTACTACCTTGAAACATTTGTTTATCCTCTC  
AB091827 4159 CACCGGGAATCGCTTGAAGATATGAACTTCTAAGAATGGAGTCTCTTGCTACTACCTTGAAACATTTGTTTATCCTCTC

AJ006464 4305 TTTCTGTTTGATTCTACTACTACCATTAACCTGCTGCAGGATTTGTCACCATTCTGCTGACTGCTGAGACTCCATTTT  
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AJ006464 4385 GCTGCTATGCAAGGAGATGAAAGAGGCAGGCCTAAAGGAGCAGTAGGACATAACATGGTTTTTATTTCTATCTGTATGA  
AB091827 4319 GCTGCTATGCAAGGAGATGAAAGAGGCAGGCCTAAAGGAGCAGTAGGACATAACATGGTTTTTATTTCTATCTGTATGA

AJ006464 4465 TCTTAATGGTGAAGTTTCCTTTTTTCGTCAGCATTTATCTCTTTGTTATCCTGACATGTTTTAATTAGTTTAGTGGGTTTT  
AB091827 4399 TCTTAATGGTGAAGTTTCCTTTTTTCGTCAGCATTTATCTCTTTGTTATCCTGACATGTTTTAATTAGTTTAGTGGGTTTT

AJ006464 4545 TTTTTTTCTATTTGGTGGTGGTCTTTTTGTTGTTGTTTTTGTGGTCTGATTTTGATTTTGGATCACTTCGTGTTTTA  
AB091827 4479 TTTTTT - CTATGGTGGTGGTGTCTTTTTGTTGTTGTTTTTGTGGTCTGATTTTGATTTTGGATCACTTCGTGTTTTA

AJ006464 4625 CAGTAATTACTTTTAAATGGTGCATTTGCTTCTGATTTTTTTTTTTTTTATGAAGCATCACATCAGTTTACCTCATATCTC  
AB091827 4558 CAGTAATTACTTTTAAATGGTGCATTTGCTTCTGATTTTTTTTTTTTTT - ATGAAGCATCACATCAGTTTACCTCATATCTC

AJ006464 4705 AATTCATCCTTCATGCATTTTTTTTTTAACTCATTGATCTTCAAGCTGCAGAGGGCTAGCAATGGGTATCACCTGCG  
AB091827 4637 AATTCATCCTTCATGCATTTTTTTTTTAACTCATTGATCTTCAAGCTGCAGAGGGCTAGCAATGGGTATCACCTGCG

AJ006464 4785 AGCCCTGGCATGTACACACGGACATTTGCCACCCTGAAAGCAAAAGCTGGAGAAGTTGGCCACCTGAGTCAAGGAGGT  
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AJ006464 4865 GGTGCTGGTGTGAGTTCACAGCTCACAGGGGACGGTGAACGTTGACATTGACTTTGGCAGTGTGTACTATGCTCTACTCC  
AB091827 4797 GGTGCTGGTGTGAGTTCACAGCTCACAGGGGACGGTGAACGTTGACATTGACTTTGGCAGTGTGTACTATGCTCTACTCC

AJ006464 4945 TATATATACTCTATAGATGTTAGGCATTAAGGATAAGTGATCTTAAATTTACTGAAATTTTGTTAAGTTGATTAGATTTA  
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AJ006464 5025 CATTAAATGTTTATATTTGTGTTTTTTCTTTTATTTTAGCACTTCCAACAAAAATGCCTTTATTCATTTATTAGGAAGAAA  
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AJ006464 5105 TTGGAGTGGCGAACACAAACTAGCAAAATTAATTAATTGGCTGTGGGCCCAAATTTGAATTC-----  
AB091827 5037 TTGGAGTGGCGAACACAAACTAGCAAAATTAATTAATTGGCTGTGGGCCCAAATTTGAATTCCTTATTAATTCAAAGTGA

AJ006464 -----  
AB091827 5117 AGGAAGTGTGAGAGTTTCTATTGCTGGTCATGAAGTTCACCACGAAGAGTCAGTTTAGTTTGTACCGAGAGGCATTTAGC

AJ006464 -----  
AB091827 5197 TGAGAGTGAATTTGAGTTGGGCATCTCTATGATGCAGTCCAGACTTGTGTTTAAGTTTACAGGTACCTCTTGGACTCCTGA

AJ006464 -----  
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AJ006464 -----  
AB091827 5357 GAGACCTGACCAGTCACGAAGGACCGCTGCAGACTCTTCTGCAGGACCATGCTACATATTCAGCTGGAGAGGGAAACCG

AJ006464 -----  
AB091827 5437 CATCTGATGGGAATGGATTGTTTTGCTTGTTCAGAATTTTGTCTGTGAGATGTTGTTAAACTTTGCATTGTTTTCTT

AJ006464 -----  
AB091827 5517 TTTTCTTTTTTTTTCCCTATAGTCAATTAAGAATAAGGGGTAGATAATCATAAGTATTTGGGCTGGGAGGGATTGTTAA

AJ006464 -----  
AB091827 5597 GTAATCTTAGGTGGGTGGTAAATTTAGGAAATTAAGTTAGGATAAGATAGGATAAGATAAGATAAGCTAGGATAAGTTAG

AJ006464 -----  
AB091827 5677 ATAAATTAGGATAAGTTAGATAAGTTAGATAAAATCCATAAGATAGGATAAGTTCCATAAGATAGGATAAGTTAGTTCA

AJ006464 -----  
AB091827 5757 CATAGGATAAGCATAGGATAAGTTAGATCACATAGGATAAGTTAGATCACATAGGATAAGTTAGATCAAATACCTCAACA

AJ006464 -----  
AB091827 5837 AGTGGACGAGTGTACTTATTGGTCCCTTACCCCTACCAACTTTACCTTTAAGGCCGAGCTCAGAGGGAACTACAGGGAAA

AJ006464 -----  
AB091827 5917 TCAGTGTAGGAGTGAATTTGGACATGGATGACATTCTAGTGAAGGTTAGGACGATTAGAGTAATCTAATACAGGCTCTGG

AJ006464 -----  
AB091827 5997 GAATTAACCTCAAGGGATTTTAGGAATGCCAGATGACAGTCATCATTTGATAAACTGTGCTGGAATAAAGTTTAGAATG

AJ006464 -----  
AB091827 6077 TTGAATGGTAAATGTTAATGGAAATGTACGAAAAAGAATAAAAGCTCTTTCCATACCCCTCCCCCTCCCTACCCCACTC

AJ006464 -----  
AB091827 6157 TTTCTTTCCCTCCCCCTCCATAACCTACCCCTTCTCCCAAACACACCCCTCCATTTCCCTAACTCACCACGTCTCCCTT

AJ006464 -----  
AB091827 6237 CCACTCCCTAACCCACCCCTTCTTCCTCCCTCCCTCCAGAACCCGCCCATCTTCCCTCCCTAACACACCCCTTCT

AJ006464 -----  
AB091827 6317 TCCTTTCCCTCCCAACCCCACTTCAAACCTATATTAAGTGTATTCTTTTATATATTTCTTTGTATTAATAAACTGT

AJ006464 -----  
AB091827 6397 **ATTGATGTTAC**