

Exon 1a

1a

|                   |                                                     |     |
|-------------------|-----------------------------------------------------|-----|
| Rat-1a-EF116601   | -----TGC-AACT-                                      | 7   |
| Human-1a-CB958830 | GGAAAACACAACCAGAGTCTTCGGTGTTAATTCCTGGTCTTCCCAACTA   | 50  |
| Mouse-1a-BC010262 | -----TGTAACCTTGC-AACT-                              | 15  |
| Rat-1a-AB005743   | -----CTTTGAAGAGATCAGTGACTCTGTAACCTTGC-AACT-         | 36  |
|                   | * * *                                               |     |
| Rat-1a-EF116601   | GCATTTTGATGGTTTCCTTTAAACTCGTGGACTTGTACTCTCTCCTCGGAT | 57  |
| Human-1a-CB958830 | GCATTCTGAAAGTGCATTAACATTTGTGGCCTTGTGCTCTTTTCATCGGAC | 100 |
| Mouse-1a-BC010262 | GCATTTTGATGGTTTCCTTTAAACTTGTGGCCTTGCACTCTCTCATCGGAC | 65  |
| Rat-1a-AB005743   | GCATTTTGATGGTTTCCTTTAAACTCGCGGACTTGTACTCTCTCCTCGGAT | 86  |
|                   | *****                                               |     |
| Rat-1a-EF116601   | GGCTAGCTGATTACTTCTGTGTA                             | 80  |
| Human-1a-CB958830 | TTCTAA-----TG                                       | 108 |
| Mouse-1a-BC010262 | TTCTAGCTGATTACTTCTGTGTA                             | 88  |
| Rat-1a-AB005743   | GGCTAGCTGATTACTTCTGTGTA                             | 109 |
|                   | *** *                                               |     |

Exon 1b

1b

|                       |                                                    |     |
|-----------------------|----------------------------------------------------|-----|
| Rat-1b-EF116602       | -----                                              | 0   |
| Human-1b-NM_001001548 | GAGGACTGCAGTGTAGGACTTTCTGCAGAATACCATTGATCCTATTAA   | 50  |
| Mouse-1b-NM_007643    | -----GACTGAGGACTTTTTCTTCTTCACAG                    | 26  |
| Rat-1b-AW919183       | -----GTTTCTTCTTCACAG                               | 15  |
| Rat-1b-EF116602       | -----GGAGCAACTGGTGAATGG---TTTCCTAGCT-              | 28  |
| Human-1b-NM_001001548 | GAATTGTCC-AAATGT-TGGAGCATTTGATTGAAAAATCCTTCTTAGCCA | 98  |
| Mouse-1b-NM_007643    | CTGCCTTCTGAAATGTGTGGAGCAACTGGTGGATGG---TTTCCTAGCC- | 72  |
| Rat-1b-AW919183       | CCGCCTTCTGAAATGTGTGGAGCAACTGGTGAATGG---TTTCCTAGCT- | 61  |
|                       | *****                                              |     |
| Rat-1b-EF116602       | TTTCAAAG                                           | 36  |
| Human-1b-NM_001001548 | TTTTAAAG                                           | 106 |
| Mouse-1b-NM_007643    | TTTCAAAG                                           | 80  |
| Rat-1b-AW919183       | TTTCAAAG                                           | 69  |
|                       | ***                                                |     |

Exon 2

2

|                    |                                                     |     |
|--------------------|-----------------------------------------------------|-----|
| Rat-1a-EF116601    | GTAGCTTACAAATGATTCGAAGTGTTGAACTTTCTGAGTCTCAATGAAC   | 130 |
| Rat-1b-EF116602    | GTAGCTTACAAATGATTCGAAGTGTTGAACTTTCTGAGTCTCAATGAAC   | 86  |
| Human-NM_001001548 | ATAGCTTTCCAATGATTAGACGAATTGATTCTTTCTGTGACTCATCAGTT  | 156 |
| Mouse-NM_007643    | GTAGTTTACAAATGATTTGAAGTGCTGATCCTTTTCAGAGTCTCAACAGAT | 130 |
| Rat-NM_0031561     | GTAGCTTACAAATGATTCGAAGTGTTGAACTTTCTGAGTCTCAATGAAC   | 97  |
|                    | ***                                                 |     |
| Rat-1a-EF116601    | TATTTCTCACACAACCTCAGATACTGCTGTTTCATGCATGAATTAG      | 174 |
| Rat-1b-EF116602    | TATTTCTCACACAACCTCAGATACTGCTGTTTCATGCATGAATTAG      | 130 |
| Human-NM_001001548 | CATTTCTGTAAAATTCATGCTTGTGTTGATTGTGAATAA-            | 199 |
| Mouse-NM_007643    | TATTTCTTAAACAGCTCATACATTGCTGTTTATGCATGAATTAG        | 174 |
| Rat-NM_0031561     | TATTTCTCACACAACCTCAGATACTGCTGTTTCATGCATGAATTAG      | 141 |
|                    | *****                                               |     |

Exon 3

3

|                    |                                                      |     |
|--------------------|------------------------------------------------------|-----|
| Rat-1a-EF116601    | T-GAACCAG-CCACA-AGAATG-----                          | 193 |
| Rat-1b-EF116602    | T-GAACCAG-CCACAAGAATTG-----                          | 150 |
| Human-NM_001001548 | --GAACCAGAGCTTGTAGAAACCACTTTAATCATATCCAGGAGTTTGCAA   | 247 |
| Mouse-NM_007643    | TAGAACCGGGCCACGTAGAAAACACTGTGATTGTACCTGGGAGTTGGCGA   | 224 |
| Rat-NM_0031561     | TTGAACCAGGCCACATAGAAAGCATTGTAATTGTACCTGTGAGTTGGCAA   | 191 |
|                    | *****                                                |     |
| Rat-1a-EF116601    | -----                                                |     |
| Rat-1b-EF116602    | -----                                                |     |
| Human-NM00100548   | GAAA-CAGGTGCTTAACACTAATTCACCTCCTGAACAAGAAAAATGGGCT   | 296 |
| Mouse-NM_007643    | GAAAACCACTGCTCTCCCTTGATTCTGCTGCACGAGGAG---AATGGGCT   | 271 |
| Rat-NM_0031561     | GAAG-CAAGTGCTCTTCCCTTGATTCTGCTGCACGAGGAGGAGAAATGGGCT | 240 |

ATG