

**JIPSC1108\_SnappeneDNA\_INK2J00001\_TARDBP\_M337V\_SNVWT**  
18,185 bp

CGCCTTTGAAAGTGCGCGAGCTCCGACCGAGACCTGGGCCGCGCGTTGGTCGGCCGAAACCATCTGCCTACGTTACGTTGGGGGAGGTCAGCTCCATACAGCCACACTTTTTTCAACTTTCAGCTTTTCAGGCCCT  
CGCAGAACTTTACGCGCTCGAGGCTGAGGCTCGGACCCGCGCCGAACCAAGCCGCGCTTTGGTAGACGATGCAATGCACCCCTCCAGTCGAGGATATGTCGGTGTGAAAAAAGTTAGAAGTCGAAAAGTCCGGA

135

TARDBP

AGGTCTGGTTTTATTTAGCTTTCAGAGCTTCTCTGTAGGCTTGAATTTCCAGGAGGCAGCCGAGTCCCTGGGGAGAGGGTCATCGTGGCTCTCGTCGGTGCCTTCCACCTCTGGACAGGCAACCGGTGGGAG  
TCCAGGACCAAAATAAAATCGAAAGTCTCGAAGAGACATCCGAACCTAAAGGCTCTCCGTCGGGCTCAGGGACCCCTCTCCAGTAGCACCAGAGCAGCCACGGAAGGTGGAGACCTGTCCGTTGGCCACCCCTC

270

TARDBP

AGGACGCCGGTGGGCGGGGGAGGAGCGGCCCTAGCGCCATTTTGTGGGAGCGAAGCGGTGGCTGGGCTGCGCTTGGGTCGCTCGCTTCCGTTGTCCTGTCGGGCTTCCAGCAGCGGCCCTAGCGGGTGA  
TCTCGGCCACCCGCCCTCTCCGCGGGATCGCGGTAACACCCCTCGCTTCGCCACCGACCCGACGCGAACCAGGACGACGAAGCCACAGGGACAGCCCGAAGGCTGTCGCCGGATGCCCACTC

405

TARDBP

TARDBP-201

TCGCGGAGCCTTCTCACTGAGGACGCCGTAGGTGCCTGGGCTTCTGCATTGGGGCGGCCGAGGCAGACGACGCGGCTTCGGACCTGCCCGGGAAGTCAGCCGTGAGACCGGGCTAGTCTGCCGAGCGGG  
AGCGCCTCGGAAGAGTGACTCTCGCGCATCCAGAGCCGAAGACGTAACCCGCGGGCTCCGCTCTCGCTCGCCGAAAGCTGGGACGGGCGCTTCAGTCGGCACTTGGCCCGGATCAGGACGGGCTCGCCC

540

TARDBP

TARDBP-201

CTCGCGCGGAGCGCTGTTAGTCTTGGCACGGGAGGCCGTTGGCGCCGAAACGGGGGCGGGCCGCGGTGCCGCGTAGCCTGAGGCGGAGGTTGGCCCGGACCCGAGACAGTGCGGAGCCTTCGGTACTT  
GAGCGGCCCTCGCAGCAATCCAGGACCGTGCCTCCGGCCACCGCGGCTTTGCCCGGCCGCGGCCACGGCGCATCGAACTCCGCTCCAACCGGGCTGGGCTGTCAGGCGCTCGGAAGCCATGAA

675

TARDBP

TARDBP-201

TGTACTTCGAGGACGCTGCCAGCTTGGGCTGGTGTCTCTGCGCCCAACCCGGCGCGCCGAGAACTCCTCCCTCGGCTGGCACGCGGGGCTTCTGGGAGGCGAGGCCGGCACCGCCAGGACCTGTCGC  
ACATGAAAGCTCCCTGCGACGGTCAACCCGAGCACGAGGACGCGGGGTGGGGCCGCGCGCTCTTTGAGGAGGAGCCGACCGTGCAGCCGAAAGCCCTCCGCTGCGCGCGGTGCGGCTCTGACAGCG

810

TARDBP

TARDBP-201

CGCGGGCCTTGGGCTCGGCTCGCAGAGCCCGGAAGCCCAAATGAGGAACAGAGGAACTTTTCTCTGTTCTTTACCTGGTTCACTGCCCATATTAGTCTTCAAGTTCAAGTGTATGGATCGCTTG  
GCGCCGGAACCCGAGCCGAGCGTCTCGGGGCTTGGGGTTTTACTCTTGTCTCCCTTTGAAAGAGGACAAGAAATGTGGACCAAGTGACGGGTATAAGTCAGAAGTCAAGTCGACTACCTAGCGAAC

945

TARDBP

TARDBP-201

CTTAGGAAATCGACTGGGACCTATCACGCCATGCCCTACGCCAGTTAGGCTCCTCCTCTGCCTTACAGGATTACTTAAAGACTAACCCGATTGTCATAAAATAGTACTGTTTATGTTCCCTTGATACCCATG  
GAATCCTTTTAGCTGACCTGGATAGTGGGGTACGGAGTCTGTAATCCGAGGAGGAGCGGAAGTCTTAATGAATTGCTGATTGGGCTAACAGTATTTATCGATGACAAATAAAGGGAACGATGGGATC

1080

TARDBP

TARDBP-201

CTTGTAACAGCAAGCCAGTTGGAAGTACAGTTTACAGTTTACAGTACCTGACGCATCATAAGCCTTCAGGAAAGTTTTTGAATGAATGAAGTGGCGAGGCATCAGTTTATGATAGGAAATCACTACCTTACC  
GAACATTGGTCTGTTGGTGAACCTGAGTGTCAATGTCAAAGTCAAGTGTGACTGCGTAGTATTCGGAAGTCCCTTCAAAAACTTACTTACTTGACCGCTCCGTAGTGTAAAATATCCTTTAGTGATGGGATGG

1215

TARDBP

TARDBP-201

TTCACCTCGTCAATTTTCAGGATAACCAATGCATATACGAATCCAGACAAGCATTTTTCTGGAAGTCAGAACTCTGACATGGTTTGGGATATTATCATTATAAGGAAACAGTATTCTGACATGAATGTTGTTCA  
AAGTGGAGCAGTAAAAGTCCCTATTGGTACGTATATGCTTAGGTCGTGTTCTGTAAGAACCTTCAAGTCTGAGACTGTACAAACCCTAATAGTAATATTCCTTTGTAATAAGACTGTACTTACACAAGT

1350

TARDBP

TARDBP-201

TTCATATCTCTTTCTTTAGGAAAAGTAAAAGATGCTGAATATATTCGGGTAACCGAAGATGAGAACGATGAGCCATTGAAATACCATCGGAAGACGATGGGACGGTGTCTCTCACGGTTACAGCCCA  
AAGTATAGAGAAAAGAGAAATCCTTTTCAATTTCTACAGACTTATATAAGCCATTGGCTTCTACTCTTGGTACTCTGGTAACTTTATGGTAGCCTTCTGTACCTGCCACGACGAGAGGTGCCAATGTCGGGT

1485

TARDBP

TARDBP-201

1 5 10 15 20 25 30  
M S E V I R V T E D E N D E P I E I P S E D D G T V L L S T V T A Q  
ENSE0003910947  
TARDBP-201

GTTTCCAGGGCGGTGGGCTTCGCTACAGGAATCCAGTGTCTCAGTGTATGAGAGGTGTCCGGCTGGTAGAAGAAATCTGCATGCCCCAGATGCTGGCTGGGAAATCTGGTGTATGTTGTCAACTATCCAAA  
CAAAGTCCCGCACACCCGAAAGCGATGCTTAGGTCACAGAGTCACATACTCTCACAGGCCGACCATCTTCTTAAGACGTACGGGCTTACGACCGACCCCTTAGACCACATACAACAGTTGATAGGTTT

1620

TARDBP

TARDBP-201

35 40 45 50 55 60 65 70 75  
F P G A C G L R Y R N P V S Q C M R G V R L V E G I L H A P D A G W G N L V Y V V N Y P K  
ENSE0003910947  
TARDBP-201

AGGTTTGTACCATTGGTTTTTGAATCATGCTGAAGTGTGTTCAAGTGTGTCTCATCCATGGATCTTAGCCCTTTTGGTGGCAGAAATGCTCCTGAAACTTAAGTATTTCTTGAACCTCAGTGTAGAC  
TCCAACAATGGTAAACCAAAAACATTAGTACGACTTACACAAGTCCACACAGAGTAGGTACCTAGAAATCGGAGAAAACCCGCTTACAGAGGACTTTGAATTCATAAAGGAACTTGAAGTCACAATCTG

1755

TARDBP

TARDBP-201

-----  
TARDBP-201

AAGTTTGAAGACCAGAGTCTAAATTTATGAAACTGGGGATTGTAGATCATTTTAAAGAGAAAACAATGTATTTAAAAAATATCTGAATAAACTTTGCCAAGTTGATGATAAATTTCAAGGAATCACTAAGAA  
TTCAAACCTTCTGGTGTCTCAGATTTAAATACCTTTGACCCCTAACATCTAGTAAAATTTCTCTTTTGTACATAAATTTTTATAGACTTATTTGAAACGGTTCAACTACTATTTAAAGTCTTAGTGATTCTT

1890

TARDBP

TARDBP-201

TARDBP-201

TGTTTTGTACATAAATCATTTGTTGTAATAGATTCTTCTGAAGTGCTTCAGTGTTTGGATTGTATCATTCCTTCTGCTTTGGTGTACATTCATTCCAGCAAACTCGAGTTCATTTTTCCCTTAAATGAGCAAAAC  
ACAAACATGTATTTAGTAACAACATTTATCTAAGAAGACTTCACGAAGTCAACAACCTAAACTAGTAAACAGGAAAACCACAATGTAGTAAGTAAGTCGTTTAGACTCAAGTAAAAAGGGAAATTTACTCGTTTG

2025

TARDBP

TARDBP-201

TARDBP-201

AGTTGGAGTAGCCAAATCTGAATTAGTGCAGTTCCAATTACAATTTCCGAGGTTCTGGTCTTATCCTTCTCTCTCGCTCTTATCAATGATGTTCTAAATCTAAGAAAAGGAAGCATGAAGTTTAAAGAGTGTGCC  
TCAACCTCATCGGTTTAGAACTTAATACAGTCAAGGTTAATGTTAAAGCTCCAAGACCAGAATAGGAAAGAGAGACGGGAATAGTTACTACAAGATTAGATTCTTTTCCCTCGTACTTCAAATTTCTCACACGG

2160

TARDBP

TARDBP-201

TARDBP-201

AAGGAAATACCTAATTTACAGCATTTTGAAGTAGTGTGCTGTTAGTAGTCGATCTGTCTGTGTGTTCTTTTATTATAACTTGGTATTGCAACAAGTCCATCAAATTTGGTCAGTATGCAAGACACCCCTTTTACA  
TTCCCTTATGGATTAAGTCGTAACCTTCAACACGACAATCATCAGCTAGACAGACACAAGGAAAATAATATTGAACCATAACGTTGTTTCAGGTAGTTTAAACCAGTCATACGTTCTGTGGGAAAATGT

2295

TARDBP

TARDBP-201

TARDBP-201

TGCTAGGAAAACCTTTAGGGCTAGGACCGGTGACTCATGCTGTAATCCAGCACTTTGGGAGGCCGAGGCAAGTGGATCACCTGAGATCAGGAGTTTGAAGATGAGCCTGGCCAAACATGATGAAACCCATCTCT  
ACAGATCCTTTTGAATCCCGATCCGTGCCACTGAGTACGGACATTAGGGTCGTGAAACCTCCGGCTCCGTCCACCTAGTGGACTCTAGTCTCAAACCTACTCGGACCGGTTGACTACTTTGGGGTAGAGA

2430

TARDBP

TARDBP-201

TARDBP-201

ATCAAAAACAAAACTCTCGATGTGGTGGTGGGTCCTGTAATACTAGCTACTCAGGAGGCAGACGCAAGGAAATCGCTTGAACCGGGAGGCAGAGTTGCACTGAGCAGAGATTGTGCCATTGCACTCCAGC  
TAGTTTTGTGTTTTAGAGACCTACACCACCACCACGGACATTATGATCGATGAGTCTCCGCTCGCTGCTTTCAGGAACTTGGCCCTCCGCTCCAACGCTCACTCGTCTCTAACACGGTAACGTGAGGTCG

2565

TARDBP

TARDBP-201

TARDBP-201

CTGGGCAACAAGAGCGAAACTCCGTCTCAAACAACAAAAAAGCAAAAAAATTTGGCGTGGTGGCGGGGGCTGTAGTCCGAGCTAGTCTGGAGGCTGAGGCAAGGAAATCGCTTGAACCTGGGAGCGGAGAG  
GACCCGTTGTTCTCGCTTGAAGGCAAGTTTTGTTTTTTTTGCTTTTGTTTTTAACCACACACCGCCCGGACATCAGGGTCGATCAGAACCTCCGACTCCGCTCTTAGCGAACTTGGACCCTCCGCCTCT

2700

TARDBP

TARDBP-201

TARDBP-201

TTACTTTAAGCTGAGGTCGCGCCGCTACACTCCAACCTGTGACAGAGCAAGACTTCGTCTCAAAAAAATAAATTTGATAATGTAACCTCGGGTTTTTAGTATGCTGTTTCTTCAGCCAGTGGGTATAGATTA  
AATGAAATTCGACTCCAGCGCGGCGATGTGAGGTTGGACACTGTCTCGTTCTGAAGCAGAGTTTTTTTTTTTTAACTATTACATTGAGCCCAAAAAATCATACGACAAAAGAAGTCGGTCACCCATATCTAAT

2835

TARDBP

TARDBP-201

TARDBP-201

ATATTTACTCAAATTTAAATGTCAGGCTCGGTGCAATGGCTCACACCTGTAATCCAGCACTTTGGGAGGCTGAGGCAAGCAGATCACCTGAGGTCGGAAGTTCAGACCACCTAGCCAAACATGGTGAACCC  
TATAAATGAGTTTTAAATTTTACAGTCCGAGCCAGTTACCGAGTGTGGACATTAGGGTCGTGAAACCTCCGACTCCGTTCTAGTGGACTCCAGGCTTCAAGTTCTGGTGGGATCGGTTGTACCACCTTTGGG

2970

TARDBP

TARDBP-201

TARDBP-201

TGCTCTACTAAAAATTTAAAAATTAGCCAGGCGTGGTGGTTCCGCGCTGTAGTCTCAGTTATTTGGGAGGCTGAGGCAAGGAGAAATGCTTGAACCGGGAGGTGGAGATTGCAGTAAGCTGAGATCGTGCCACTG  
ACAGAGATGATTTTTAAGTTTTAATCGGTCCGACCACCAAGCGCGGACATCAGAGTCAATAAACCTCCGACTCCGCTCTTAAACGAACTTGGCCCTCACCTTAACTGATTCGACTCTAGCACGGTGAC

3105

TARDBP

TARDBP-201

TARDBP-201

CTCTCTGGCCTGGCAGCAGAGCAGAGACACCGTCTCAAAAAAATTTTTAAATGTCATTAAATTTATCTCCCAAGGCTGGACATGGTGGCTCACATCTGTAATCCAGCTACTCGGGAGGCTGAGGCAAGGAGAAAT  
GAGAGACCGGACCGTCTGCTCTGCTCTGTGGCAGAGTTTTTTTTTAAATAATTTACAGTAAATTAATAGAGGGGTCGACCTGTACCACCGAGTGTAGACATTAGGGTCGATGAGCCCTCCGACTCCGCTCTTAA

3240

TARDBP

TARDBP-201

TARDBP-201

CACCTTGAACCGGGAGGCAAGGTTGCAAGAGGGGAGATTGCCCACTGCCTCCAGCTAGGTGACAGAAATGAGACTCCGCTCAAAAAAATAATCTCCCTTCTCTTCTAAATAACCTAAGGTTGAG  
GTGAACCTGGGCGCTCCGCTCCAACGCTCTCCCTCTAACGCGGTGACGTGAGGTCGGATCCACTGTCTTACTCTGAGGCAAGTTTTTTTTTTAATAGAGGGGAAAGAGAAGATTATTGGATTCCAACCTC

3375

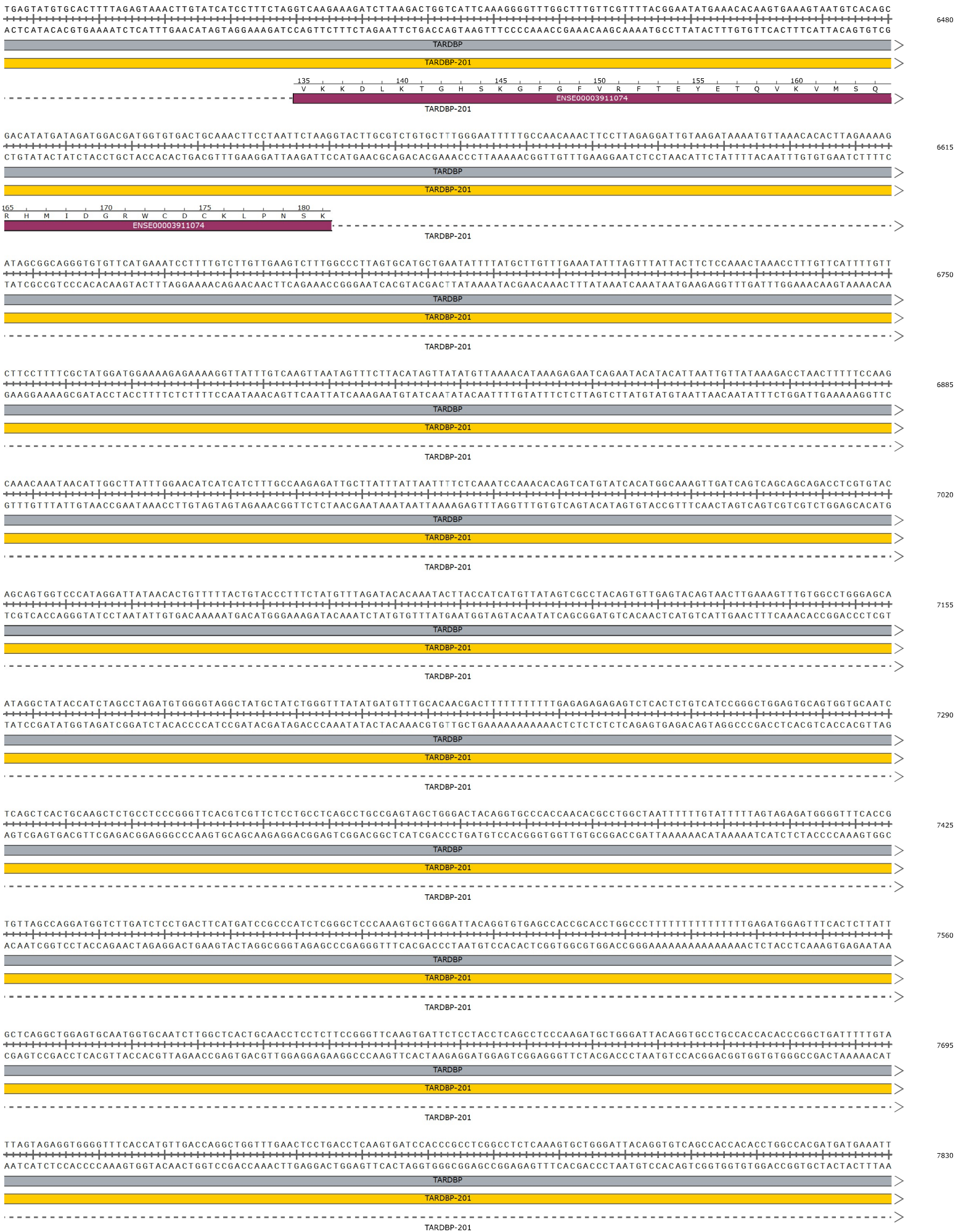
TARDBP

TARDBP-201

TARDBP-201









AGCTCACTACACCTAGAAGTCTTGGGCTCAGCCCTCCAGGGGAGGATCCTCCAGCTTCAGCCTCCAGTAGCTAGGACAGATGCATGCCACTACGCCAGCTAATGTGGCTTTTTTTGTGGTTTTTTTTGATAG  
TCGAGTGATGTGGGATCTTGAGGACCCGAGTCGGAGGTCCTCCAGCTTCAGCCTCCAGTAGGATCGAAGTCGAGGGTTTCATCGATCCTGTCTACGTACGGTGATGCGGGTCGATTACACCAGAAAAACCAAAAAAACTATC

9450

TARDBP

TARDBP-201

TARDBP-201

AGGTGGGGTCTCCCTGTGTGCTAGGCTGCCAGGCTAGTCTTGAAGTATTGGCCTCACACAGTCTCCACCTTGGCCTCCAAAGCGCTAGGATTACAGGCATGAGCCACCATGCCAGCCTATGTCTTTTGA  
TCCACCAGAGGGACACAAACAGATCCGACGGTCCGATCAGAAGTGTGATAACCGGAGTGTGTACAGGAGGGTGAACCGGAGGGTTTCGCGATCCTAATGTCCGTACTCGGTGGTACGGGTCCGATACAGAAAACT

9585

TARDBP

TARDBP-201

TARDBP-201

PCR Forward  
ATCGACTGAAATATCACTGCTGCTG

AAATCGACTGAAATATCACTGCTGCTGTTAATAAACTAAAAGCTGATTGGGGGTTAAATGAAATGAGTGTTCATTGCTTATTTTTCTCTGGCTTTAGATAAATTAATGCTTGTAACTAAAGTTTTGTGCT  
TTTAGCTGACTTTATAGTGACGACGACAATTTATTTGATTTTCGACATAACCCCAAATTTACTTTACTCACAAAGTAACGAATAAAAAGGAGACCGAAATCTATTTAATTACGAACATTAGATTTCAAAACAACGA

9720

TARDBP

TARDBP-201

TARDBP-201

ACTTTAAATATATGAATCAGTGGTTTAACTTCTTTGTTTACATCCCTTATTTCTTAGATTGGCGAGTCTCTTGTGGAGAGGACTTGATCATTAAAGGAATCAGCGTTCATATATCCAATGCCGAACCTAAG  
TGAAATTTATATACTTAGTCACCAAAATAGAAAGAAACAAATGTAGGGAATAAAGAAATCTAACCGGTGAGAGAAACCTCTCTGAACTAGTAATTTCTTAGTCGCAAGTATATAGGTTACGGCTTGGATTC

9855

TARDBP

TARDBP-201

I A Q S L C G E D L I K G I S V H I S N A E P K  
ENSE00001145815

TARDBP-201

Sanger Sequencing Primer  
GGATTTGGTAATAGCAGAGG

CACAATAGCAATAGACAGTTAGAAAGAAGTGAAGATTTGGTGGTAATCCAGGTGGCTTTGGGAATCAGGGTGGATTTGGTAATAGCAGAGGGGGTGGAGCTGGTTGGGAAACAATCAAGGTAGTAATATGGGT  
GTGTTATCGTTATCTGTCAATCTTCTTCACTTCTAAACCACATTAGGTCCACCGAAACCTTAGTCCACCTAAACCATTATCGTCTCCCCACCTCGACCAAACCTTTGTTAGTTCATCATTATACCCA

9990

TARDBP

TARDBP-201

H N S N R Q L E R S G R F G N P G G F G N Q G G F G N S R G G A G L G N N Q G S N M G  
ENSE00001145815

TARDBP-201

gRNA Protospacer  
ACAGAGCAGTTGGGTATGA

GGTGGGATGAACTTTGGTGGTTCAGCATTAAATCCAGCCATGATGGCTGCCGCCAGGCAGCACTACAGAGCAGTTGGGGTATGATGGGCATGTTAGCCAGCCAGCAGAGAACCAGTCAGGCCCATCGGGTAAATAAC  
CCACCTACTTTGAAACCAGCAAGTCGTAATTAGGTCCGTACTACCGACGGCGGGTCCGTGATGCTCGTCAACCCATACTACCCGTACAATCGGTCCGGTCGCTTGGTCAGTCCGGGTAGCCATTATTG

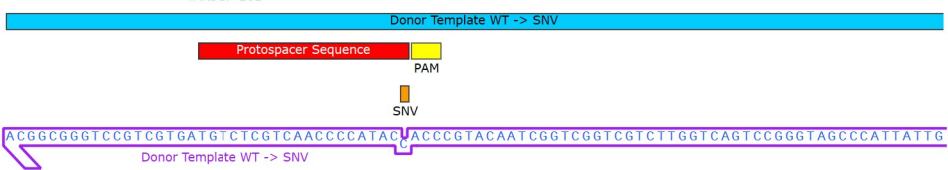
10,125

TARDBP

TARDBP-201

G G M N F G A F S I N P A M M A A A Q A A L Q S S W G M M G M L A S Q Q N Q S G P S G N N  
ENSE00001145815

TARDBP-201



CAAAACCAAGGCAACATGCAGAGGGAGCCAAACCAGGCCCTCGGTTCTGGAATAACTCTTATAGTG6CTAATTTCTGGTGCAGCAATTGGTTGGGATCAGCATCCAATGCAGGGTCCGGCAGTGGTTTTAAT  
GTTTTGGTCCGTTGTACGTCTCCCTCGGTTGGTCCGGAAGCCAAAGACCTTTATTGAGAATATCACCAGATTAAGACCACGTGTTAAACCACCTTAGTCGTAGGTTACGTCCCAGCCGTCACCAAAATTA

10,260

TARDBP

TARDBP-201

Q N Q G N M Q R E P N Q A F G S G N N S Y S G S N N S G A A I G W G S A S N A G S S G S G F N  
ENSE00001145815

TARDBP-201

Donor Template WT -> SNV  
GTTTGGTCCG

Donor Template WT -> SNV

GGAGGCTTTGGCTCAAGCATGGATTCTAAGTCTTCTGGCTGGGGAATGTAGACAGTGGGGTGTGGTGGTGGTATAGAATGGTGGGAATTCAAATTTTTCTAAACTCATGGTAAGTATATTGTAAATACATA  
CCTCGAAACCAGATTTCGTACCTAAGATTCAAGAGACCGACCCCTTACATCTGTACCCCAACCAACCAACCAACCATATCTTACCACCTTAAGTTTAAAAAGATTGAGTACCATTCATATAACATTTTATGTAT

10,395

TARDBP

TARDBP-201

G G F G S S M D S K S S G W G M S  
ENSE00001145815

TARDBP-201



TGTAATAAGAAATTTTCAA... 10,530

TARDBP

TARDBP-201

GTTTAAAGTGAAGTCTG... 10,665

TARDBP

TARDBP-201

CGGACTAACCATTTGGTGTGTGAT PCR Reverse

TTAGAACTACATTTCTT... 10,800

TARDBP

TARDBP-201

CCCCATACACAAAAGT... 10,935

TARDBP

TARDBP-201

CTTCTCATTCAAGAATT... 11,070

TARDBP

TARDBP-201

AAGGCTGTCTGAAC... 11,205

TARDBP

TARDBP-201

AGATGTGTCTCTCA... 11,340

TARDBP

TARDBP-201

AGATAACCCACATT... 11,475

TARDBP

TARDBP-201

AAGCTGATGGCTG... 11,610

TARDBP

TARDBP-201

CTGTTTGTCTGAG... 11,745

TARDBP

TARDBP-201

GTTAATTCCTTTT... 11,880

TARDBP

TARDBP-201

ACCTGATACCCAG... 12,015

TARDBP

TARDBP-201

TCTTAGTGCCTCT... 12,150

TARDBP

TARDBP-201

AGCAAAGCATATCA... 12,285

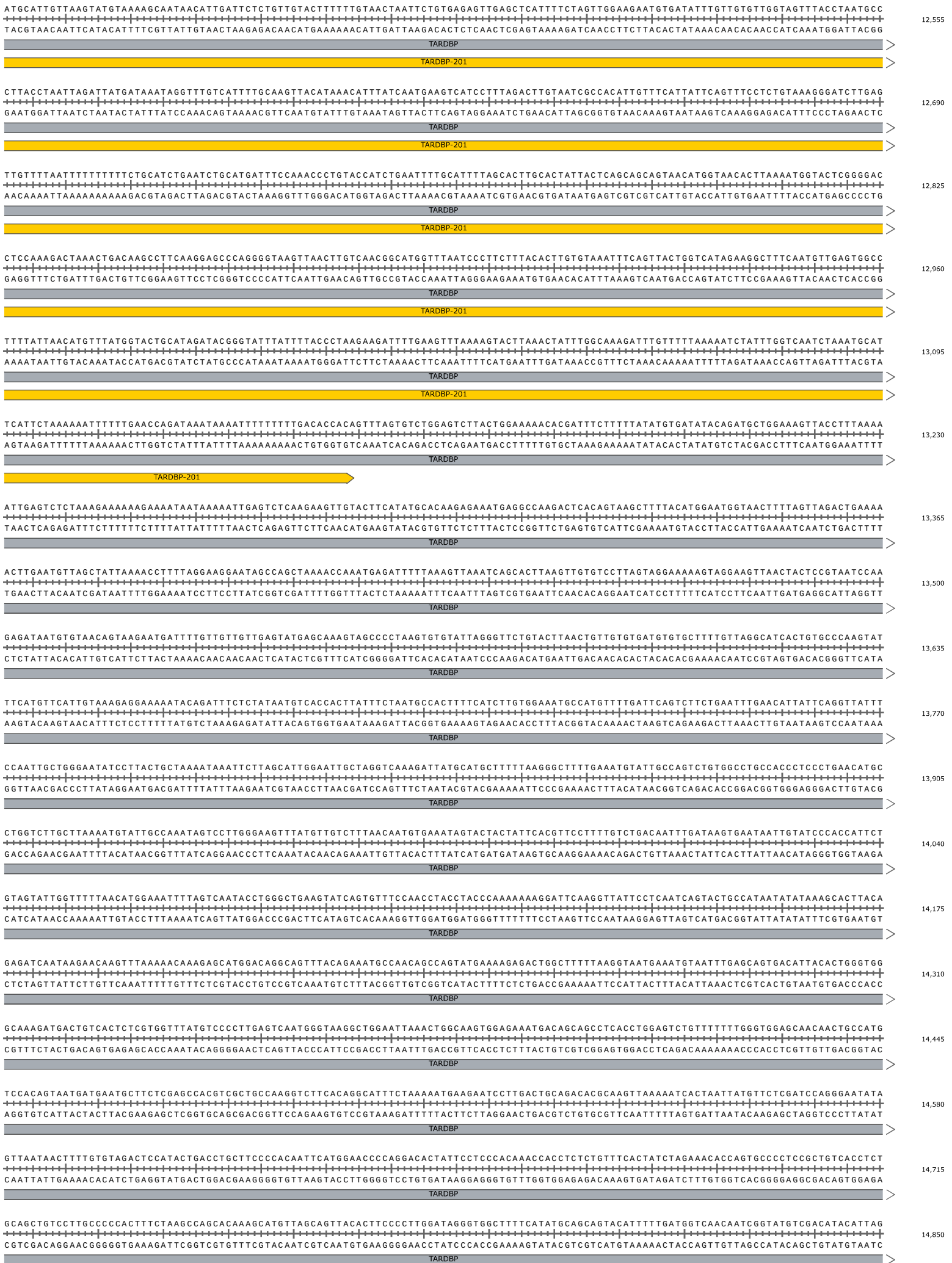
TARDBP

TARDBP-201

ATAGCTTTAAGAAT... 12,420

TARDBP

TARDBP-201





CGCTCGAGTAGCTGGGATTACAGGCATGTACACCCACACCCGGCTAATTTTGTATTTTTATTAGAGACGGGGTTCTCCATGCTGGTCAAGGCTGGCCTCAGGTGACCCACCTGCCTCGGCCCTCCAAAGTGCTGG  
GCGAGCTCATCGACCCTAATGTCCGTACATGGTGGTGTGGGCCGATTAAACATAAAAAATAATCTCTGCCCAAAGAGGTACGACCAGTCCGACCCGGAGTCCACTGGGTGGACGGAGCCGGAGGGTTTCAGGACC

17,550

TARDBP

GATTACAGGCGTGAGCCACACCTGGCCTAAAAATCATTTAATTTTTATGCTTGCCTAGTTATAAGGTCAAAGAGAATCAAATGACTGATGCAGTCAGCACCTAACACCTCTGTATATGGGAAGGGGGTAATGA  
CTAATGTCCGCACTCGGTGTGGACCGGATTTTAGTAAATTAATAAATACGAACGGATCAATATTCCAGTTTCTCTTAGTTTACTGACTACGTCAGTCGTGGATTGTTGGAGACATATACCCTTCCCCATTACT

17,685

TARDBP

GAACATACTATTTGGAATAATAACAGCCTAAGAGCCAAGTGTGAAGTTACATTTCTGCCTACCACAGCTAAAGCTCTCCTCACTGTCTCCTACCAGTCTCCTTTCCATCAATTACCAGTCTCTTGTATAAA  
CTTGTATGATAAACCTTTATTATTGTTCGGATTCTCGGTTACAGCACTTCAATGTAAGACGGATGGTGTGCGATTTTCGAGAGGAGTGACAGAGGATGGGTCAGGAGGAAAGGTAGTTAATGGTCAGAGAACATATT

17,820

TARDBP

TGTATCCATTACCAAGGCTCACAGACTGGGAGTGATTTTCTCCTTTGGAGCTCGTCCAGAATCCATCAGCCTCACACACATATTTACCTGCAAAATCATTGGAAAAGCAAAAATGTTAACTGCATGTATAAAGTG  
ACATAGGTAATGGTCCGAGTGTCTGACCCTCACTAAAAAGAGGAAACCTCGAGCAGGCTTAGGTAGTCGGAGTGTGTATAAATGGACGTTTAGTAACCTTTTCGTTTTTACAATTGACGTACATATTCTAC

17,955

TARDBP

GTTGTCATTTGCTTGAATACCCCTTGAAAAATGTTGATTTCTGAGCATCAGTGGGACATAGAGGTGCTGAAGAACCATTTTACATGATTTTATAAATAGGAGGCTCTGCAATTACCATGTTTCTTGCACAAAGT  
CAACAGTAAACGAACCTTATGGGGGAACTTTTTACAACCTAAGAACTCGTAGTCACCCTGTATCTCCACAGACTTCTTGGTAAAATGACTAAAGTATTTATCCTCCAGAGACGTAATGGTACAAACGAACGTTTCA

18,090

TARDBP

GGAAACCTTTTAGATGTGTAACCTTGAATATGTATCAAGATCTCAAGTGTAAATGATAAGGTGTTGACTTGTAAATTAACCATTGGGAATACA  
CCTTTGGAAAATCTACACATTGAACCTTATACATAGTTCTAGAGTTCACGAATTACTATTCCACAACCTGAACAATTTAATTTGGTAAACCTTATGT

3'  
18,185  
5'

TARDBP

| Feature                | Location  | Size      | Start | End | Type            |
|------------------------|---|-----------|-------|-----|-----------------|
| <b>TARDBP</b>          | 1 .. 18,185   | 18,185 bp | █     | →   | gene            |
| /note                  | = gene <a href="#">ENSG00000120948</a><br>Protein coding  |           |       |     |                 |
| <b>TARDBP-205</b>      | 1 .. 8146   | 8146 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000473118</a>  |           |       |     |                 |
| <b>TARDBP-236</b>      | 81 .. 11,266  | 11,186 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000639083</a>  |           |       |     |                 |
| <b>TARDBP-237</b>      | 82 .. 11,840  | 11,759 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000639599</a><br>Nonsense mediated decay   |           |       |     |                 |
| <b>TARDBP-235</b>      | 279 .. 10,905   | 10,627 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000629725</a>  |           |       |     |                 |
| <b>TARDBP-203</b>      | 310 .. 10,515   | 10,206 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000439080</a><br>Nonsense mediated decay   |           |       |     |                 |
| <b>TARDBP-201</b>      | 311 .. 13,149   | 12,839 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000240185</a>  |           |       |     |                 |
| <b>TARDBP-204</b>      | 311 .. 9833   | 9523 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000472476</a><br>Nonsense mediated decay   |           |       |     |                 |
| <b>TARDBP-207</b>      | 311 .. 8246   | 7936 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000476201</a>  |           |       |     |                 |
| <b>TARDBP-219</b>      | 311 .. 6110   | 5800 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000613864</a>  |           |       |     |                 |
| <b>TARDBP-221</b>      | 319 .. 18,185   | 17,867 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000614757</a><br>Nonsense mediated decay   |           |       |     |                 |
| <b>TARDBP-231</b>      | 327 .. 9967   | 9641 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000621715</a>  |           |       |     |                 |
| <b>TARDBP-206</b>      | 1373 .. 12,676  | 11,304 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000473869</a><br>Nonsense mediated decay   |           |       |     |                 |
| <b>TARDBP-202</b>      | 1373 .. 11,840  | 10,468 bp | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000315091</a>  |           |       |     |                 |
| <b>TARDBP-222</b>      | 1385 .. 10,998  | 9614 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000616545</a>  |           |       |     |                 |
| <b>TARDBP-232</b>      | 1385 .. 10,998  | 9614 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000621790</a>  |           |       |     |                 |
| <b>TARDBP-222</b>      | 1385 .. 10,984  | 9600 bp   | █     | →   | CDS             |
| ▶ 6 segments = 906 bp  |   |           |       |     |                 |
| /note                  | = coding sequence <a href="#">ENSP00000484722</a>   |           |       |     |                 |
| /translation           | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGNLVYVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH<br>SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDCCLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV\FIPKPFRAFAFVTFADDQ,,IAQSLCGEDLIKIGSVHISNAEPKHNSNRQLERSGRFGGNP,,GILSTCF<br>bDQEMHDFRRL* 34.2 kDa   |           |       |     |                 |
| <b>TARDBP-202</b>      | 1385 .. 10,905  | 9521 bp   | █     | →   | CDS             |
| ▶ 6 segments = 888 bp  |   |           |       |     |                 |
| /note                  | = coding sequence <a href="#">ENSP00000313129</a>   |           |       |     |                 |
| /translation           | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGNLVYVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH<br>SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDCCLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV\FIPKPFRAFAFVTFADDQ,,IAQSLCGEDLIKIGSVHISNAEPKHNSNRQLERSGRFG,,VHLISNVYGR<br>S95LHML* 33.5 kDa   |           |       |     |                 |
| <b>TARDBP-232</b>      | 1385 .. 10,905  | 9521 bp   | █     | →   | CDS             |
| ▶ 6 segments = 915 bp  |   |           |       |     |                 |
| /note                  | = coding sequence <a href="#">ENSP00000482191</a>   |           |       |     |                 |
| /translation           | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGNLVYVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH<br>SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDCCLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV\FIPKPFRAFAFVTFADDQ,,IAQSLCGEDLIKIGSVHISNAEPKHNSNRQLERSGRFGGNPGGFGNQ,,<br>Y04LHML* 34.1 kDa  |           |       |     |                 |
| <b>TARDBP-235</b>      | 1385 .. 10,905  | 9521 bp   | █     | →   | CDS             |
| ▶ 6 segments = 897 bp  |   |           |       |     |                 |
| /note                  | = coding sequence <a href="#">ENSP00000486989</a>   |           |       |     |                 |
| /translation           | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGNLVYVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH<br>SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDCCLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV\FIPKPFRAFAFVTFADDQ,,IAQSLCGEDLIKIGSVHISNAEPKHNSNRQLERSGRFGGNP,,VHLISNV<br>Y98LHML* 33.7 kDa   |           |       |     |                 |
| <b>TARDBP-238</b>      | 1385 .. 10,891  | 9507 bp   | █     | →   | CDS             |
| ▶ 6 segments = 810 bp  |   |           |       |     |                 |
| /note                  | = coding sequence <a href="#">ENSP00000497327</a>   |           |       |     |                 |
| /translation           | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGNLVYVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH<br>269 amino acids = 30.7 kDa   |           |       |     |                 |
| <b>TARDBP-238</b>      | 1385 .. 10,891  | 9507 bp   | █     | →   | prim_transcript |
| /note                  | = primary transcript <a href="#">ENST00000649624</a>  |           |       |     |                 |
| <b>TARDBP-201</b>      | 1385 .. 10,311  | 8927 bp   | █     | →   | CDS             |
| ▶ 5 segments = 1245 bp |   |           |       |     |                 |
| /note                  | = coding sequence <a href="#">ENSP00000240185</a>   |           |       |     |                 |
| /translation           | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVSQCMRGVRLVEGILHAPDAGWGNLVYVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH<br>SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDCCLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV\FIPKPFRAFAFVTFADDQ,,IAQSLCGEDLIKIGSVHISNAEPKHNSNRQLERSGRFGGNPGGFGNQ G<br>FGNSRGGGAGLGNQGSNMGGGMNFGAFSINPAMMAAAQAALQSSWGMGMLASQNNQSGPSGNQGNMQREPQAFGSGNSNSYSGNSGAALGWGSA SNA GSGSGFNGGFGSSMDSKSSGWSGM*<br>414 amino acids = 44.7 kDa |           |       |     |                 |

| Feature                              | Location   | Size    | Start | End | Type            |
|--------------------------------------|--|---------|-------|-----|-----------------|
| <b>TARDBP-236</b>                    | 1385 .. 10,311   | 8927 bp | ■     | →   | CDS             |
| ▶ 5 segments = 1245 bp               |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000491203</a>  |         |       |     |                 |
| /translation                         | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVVSQCMRGVRLVEGILHAPDAGWGNLVVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDC KLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV/FIPKPFRAFAVTFADDQ,,IAQSLCGEDLIITKIGSVHISNAEPKHNSNRQLERSGRFGGNPGGFGNQ GFGNSRGGGAGLGNNGSNGMGGGMNFGAFSINPAMMAAAQAALQSSWGMGLASQQNQSGPSGNQNGQGNMQREPQAFGSGNSYSYSGNSGAAIGWGSASNA GSGSGFNGGGFSSMDSKSSGWGM* |         |       |     |                 |
| 414 amino acids = 44.7 kDa           |  |         |       |     |                 |
| <b>TARDBP-231</b>                    | 1385 .. 9967   | 8583 bp | ■     | →   | CDS             |
| ▶ 4 segments = 730 bp                |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000480690</a>  |         |       |     |                 |
| /translation                         | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVVSQCMRGVRLVEGILHAPDAGWGNLVVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDC KLPNSK,,IAQSLCGEDLIITKIGSVHISNAEPKHNSNRQLERSGRFGGNPGGFGNGGFGNSRGGGAGL  |         |       |     |                 |
| 243 amino acids = 26.7 kDa           |  |         |       |     |                 |
| <b>TARDBP-207</b>                    | 1385 .. 8246   | 6862 bp | ■     | →   | CDS             |
| ▶ 5 segments = 827 bp                |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000466842</a>  |         |       |     |                 |
| /translation                         | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVVSQCMRGVRLVEGILHAPDAGWGNLVVYVNYPK,,GWTWWLTSVIPATREAEAGESLEPGRQLRGEIAPLHSSL,,DNKRKMDETDASSAVKVKRAVQK TSDLIVLGLPWKTTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDC KLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV/FIPKPFRAFAVTF   |         |       |     |                 |
| 275 amino acids = 31.4 kDa           |  |         |       |     |                 |
| <b>TARDBP-205</b>                    | 1385 .. 8146   | 6762 bp | ■     | →   | CDS             |
| ▶ 4 segments = 604 bp                |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000465240</a>  |         |       |     |                 |
| /translation                         | = MSEYIRVTEDENDPEIEIPSEDDGTVLLSTVTAQFPGACGLRYRNPVVSQCMRGVRLVEGILHAPDAGWGNLVVYVNYPK,,DNKRKMDETDASSAVKVKRAVQKTSDLIVLGLPWKTTEQDLKEYFSTFGEVLMVQ,,VKKDLKTGH SKGFGFVRFTEYETQVKVMSQRHMIDGRWCDC KLPNSK,,QSQDEPLRSRKFVVGRC TED  |         |       |     |                 |
| 201 amino acids = 22.8 kDa           |  |         |       |     |                 |
| <b>TARDBP-233</b>                    | 4516 .. 10,944   | 6429 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000622057</a>   |         |       |     |                 |
| <b>TARDBP-233</b>                    | 4516 .. 10,840   | 6325 bp | ■     | →   | CDS             |
| ▶ 5 segments = 602 bp                |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000481206</a>  |         |       |     |                 |
| /translation                         | = WMRMLHQQ*K*KEQSRKHPI**CWVSHGKQPNRT*KSILVPLEKFLWCR,,SRKILRLVIQRGLALFVLRNMKHK*K*CHSDI**MDDGV TANFLILS,,KAKMSL*EA EKCLWGAVQRT*LRMSCGSSSLSTGM*WMSSPSHSGP LPLHLQ MIR,,LRSLFVERT*SLKESAFIYMPNLSIAIDS*KEVEDLV,,YNMKPSF  |         |       |     |                 |
| 200 codons (14 internal stop codons) |  |         |       |     |                 |
| <b>TARDBP-223</b>                    | 4522 .. 11,247   | 6726 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000617172</a>   |         |       |     |                 |
| <b>TARDBP-223</b>                    | 4522 .. 10,905   | 6384 bp | ■     | →   | CDS             |
| ▶ 5 segments = 638 bp                |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000479219</a>  |         |       |     |                 |
| /translation                         | = RQMLHQQ*K*KEQSRKHPI**CWVSHGKQPNRT*KSILVPLEKFLWCR,,SRKILRLVIQRGLALFVLRNMKHK*K*CHSDI**MDDGV TANFLILS,,KAKMSL*EA EKCLWGAVQRT*LRMSCGSSSLSTGM*WMSSPSHSGPLPL LHLQ MIR,,LRSLFVERT*SLKESAFIYMPNLSIAIDS*KEVEDLV,,YNMKPSF  |         |       |     |                 |
| 212 codons (16 internal stop codons) |  |         |       |     |                 |
| <b>TARDBP-225</b>                    | 4535 .. 6843   | 2309 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000618606</a><br>Retained intron  |         |       |     |                 |
| <b>TARDBP-215</b>                    | 4623 .. 11,850   | 7228 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000611963</a><br>Nonsense mediated decay  |         |       |     |                 |
| <b>TARDBP-226</b>                    | 6437 .. 11,841   | 5405 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000619555</a><br>Nonsense mediated decay  |         |       |     |                 |
| <b>TARDBP-229</b>                    | 6437 .. 11,700   | 5264 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000620632</a><br>Nonsense mediated decay  |         |       |     |                 |
| <b>TARDBP-212</b>                    | 6510 .. 11,700   | 5191 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000610369</a>   |         |       |     |                 |
| <b>TARDBP-212</b>                    | 6510 .. 10,984   | 4475 bp | ■     | →   | CDS             |
| ▶ 4 segments = 384 bp                |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000482559</a>  |         |       |     |                 |
| /translation                         | = CKLPNSK,,QSQDEPLRSRKFVVGRC TEDMTEDELREFFSQYGDVMDV/FIPKPFRAFAVTFADDQ,,IAQSLCGEDLIITKIGSVHISNAEPKHNSNRQLERSGRFGGNP,,GILSTCFLIQEFVITHHRPL*  |         |       |     |                 |
| 127 amino acids = 14.5 kDa           |  |         |       |     |                 |
| <b>TARDBP-220</b>                    | 8090 .. 11,840   | 3751 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000614494</a><br>Nonsense mediated decay  |         |       |     |                 |
| <b>TARDBP-214</b>                    | 8163 .. 18,087   | 9925 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000611136</a><br>Nonsense mediated decay  |         |       |     |                 |
| <b>TARDBP-208</b>                    | 8244 .. 12,864   | 4621 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000477447</a><br>Nonsense mediated decay  |         |       |     |                 |
| <b>TARDBP-217</b>                    | 9801 .. 18,183   | 8383 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000612542</a>   |         |       |     |                 |
| <b>TARDBP-217</b>                    | 9801 .. 12,843   | 3043 bp | ■     | →   | CDS             |
| ▶ 2 segments = 184 bp                |  |         |       |     |                 |
| /note                                | = coding sequence <a href="#">ENSP00000478249</a>  |         |       |     |                 |
| /translation                         | = RGLDH*RNQRSYICRT*AQ*Q*TVRKKWKIWW*SS,,TCTITQQ*HGNT*NGTRGPPKTKL  |         |       |     |                 |
| 61 codons (7 internal stop codons)   |  |         |       |     |                 |
| <b>TARDBP-228</b>                    | 9965 .. 12,878   | 2914 bp | ■     | →   | prim_transcript |
| /note                                | = primary transcript <a href="#">ENST00000620505</a><br>Nonsense mediated decay  |         |       |     |                 |
| <b>Donor Template WT -&gt; SNV</b>   | 10,038 .. 10,137   | 100 bp  | ■     | ↔   | misc_feature    |
| <b>Protospacer Sequence</b>          | 10,056 .. 10,075   | 20 bp   | ■     | ↔   | misc_feature    |

| Feature           | Location  | Size      |  |  | Type            |
|-------------------|---|-----------|--|--|-----------------|
| <b>SNV</b>        | 10,075 .. 10,075  | 1 bp      |  |  | variation       |
| /note             | = WT = A<br>SNV = G   |           |  |  |                 |
| <b>PAM</b>        | 10,076 .. 10,078  | 3 bp      |  |  | misc_feature    |
| <b>TARDBP-230</b> | 10,205 .. 11,930  | 1726 bp   |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000621573</a><br>Nonsense mediated decay |           |  |  |                 |
| <b>TARDBP-213</b> | 10,475 .. 13,149  | 2675 bp   |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000611008</a>                            |           |  |  |                 |
| <b>TARDBP-218</b> | 10,702 .. 12,860  | 2159 bp   |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000613177</a>                            |           |  |  |                 |
| <b>TARDBP-234</b> | 10,855 .. 18,154  | 7300 bp   |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000622108</a><br>Nonsense mediated decay |           |  |  |                 |
| <b>TARDBP-210</b> | 10,855 .. 13,396  | 2542 bp   |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000496840</a><br>Nonsense mediated decay |           |  |  |                 |
| <b>TARDBP-224</b> | 10,980 .. 11,809  | 830 bp    |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000617757</a>                            |           |  |  |                 |
| <b>TARDBP-209</b> | 11,586 .. 13,149  | 1564 bp   |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000480464</a>                            |           |  |  |                 |
| <b>TARDBP-227</b> | 12,450 .. 18,182  | 5733 bp   |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000620028</a>                            |           |  |  |                 |
| <b>MASP2</b>      | 14,180 .. 34,896  | 20,717 bp |  |  | gene            |
| /note             | = gene <a href="#">ENSG00000009724</a><br>Protein coding                        |           |  |  |                 |
| <b>MASP2-201</b>  | 14,180 .. 34,896  | 20,717 bp |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000400897</a><br>Protein coding          |           |  |  |                 |
| <b>TARDBP-211</b> | 17,316 .. 18,185  | 870 bp    |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000607145</a>                            |           |  |  |                 |
| <b>TARDBP-216</b> | 17,415 .. 18,185  | 771 bp    |  |  | prim_transcript |
| /note             | = primary transcript <a href="#">ENST00000612387</a>                            |           |  |  |                 |

| Primer   | Length  | Binding Sites    | Tm     | Date Added   |
|--|---------|------------------|--------|--------------|
| ✓ <b>PCR Forward</b><br>/sequence = ATCGACTGAAATATCACTGCTGCTG<br>44% GC / 7641.0 Da  | 25-mer  | 9588 .. 9612     | → 60°C | Apr 22, 2022 |
| ✓ <b>Sanger Sequencing Primer</b><br>/sequence = GGATTTGGTAATAGCAGAGG<br>45% GC / 6261.2 Da  | 20-mer  | 9928 .. 9947     | → 53°C | Apr 22, 2022 |
| ✓ <b>Donor Template WT -&gt; SNV</b><br>/sequence = GCCTTGTTTTGGTTATTACCCGATGGGCCTGACTGGTTCTGCTGGCTGGCTAACATGCCACCATACCCCACTGCTCTGTAGTGTGCCTGGGCGGCA<br>58% GC / 30,733.9 Da | 100-mer | 10,038 .. 10,137 | ← 81°C | Apr 22, 2022 |
| ✓ <b>gRNA Protospacer</b><br>/sequence = ACAGAGCAGTTGGGGTATGA<br>50% GC / 6246.1 Da  | 20-mer  | 10,056 .. 10,075 | → 57°C | Apr 22, 2022 |
| ✓ <b>PCR Reverse</b><br>/sequence = TAGTGTGTTGGTTACCAATCAGGC<br>44% GC / 7703.1 Da   | 25-mer  | 10,553 .. 10,577 | ← 59°C | Apr 22, 2022 |