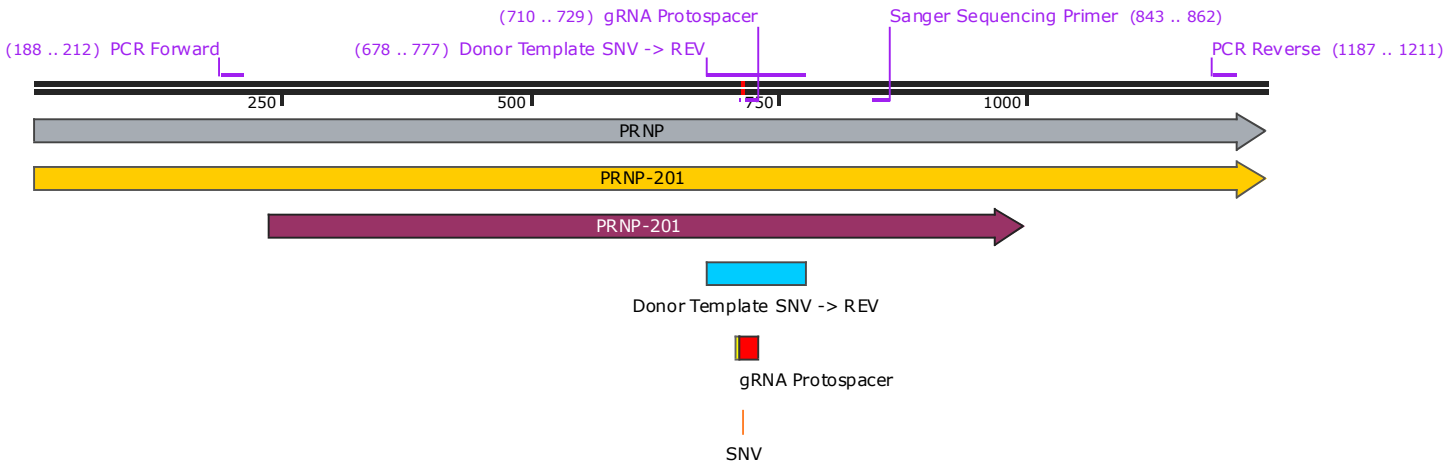
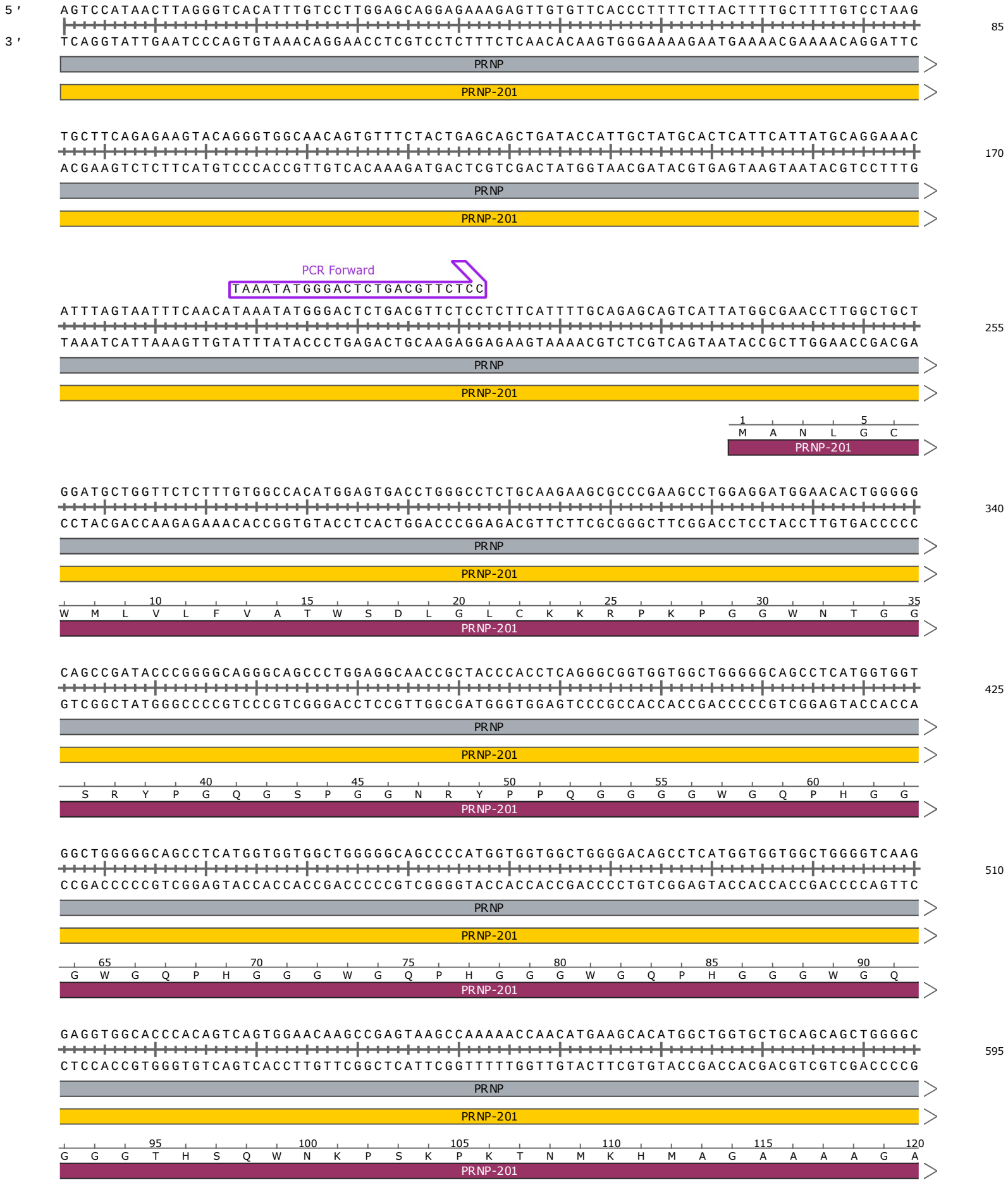
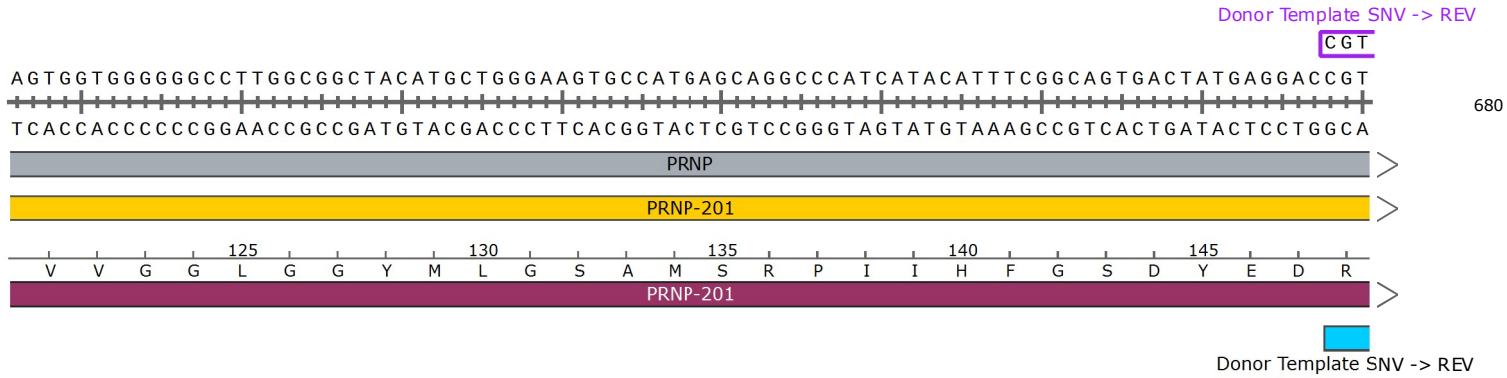
Sequence: INK2J00068R_PRNP_Q160X_B11_AA.dna (Linear / 1239 bp)
Features: 13 total
Primers: 5 total




**INK2J00068R_PRNP_Q160X_B11_AA**
1239 bp


5 ' AGTCCATAACTTAGGGTCACATTTGTCCTTGGAGCAGGAGAAAGAGTTGTGTTCACCCTTTTCTTACTTTTGCTTTTGTCCTAAG
3 ' TCAGGTATTGAATCCCAGTGTAAACAGGAACCTCGTCCTCTTTCTCAACACAAGTGGGAAAAGAATGAAAACGAAAACAGGATTC
85
PRNP
PRNP-201
TGCTTCAGAGAAGTACAGGGTGGCAACAGTGTTTCTACTGAGCAGCTGATACCATTGCTATGCACTCATTCATTATGCAGGAAAC
ACGAAGTCTCTTCATGTCCCACCGTTGTCACAAAGATGACTCGTCGACTATGGTAACGATACGTGAGTAAGTAATACGTCCTTTG
170
PRNP
PRNP-201
PCR Forward
TAAATATGGGACTCTGACGTTCTCC
ATTTAGTAATTTCAACATAAATATGGGACTCTGACGTTCTCCTCTTCATTTTGCAGAGCAGTCATTATGGCGAACCTTGGCTGCT
TAAATCATTAAAGTTGTATTTATACCCTGAGACTGCAAGAGGAGAAGTAAAACGTCTCGTCAGTAATACCGCTTGGAACCGACGA
255
PRNP
PRNP-201
1 5
M A N L G C
PRNP-201
GGATGCTGGTTCTCTTTGTGGCCACATGGAGTGACCTGGGCCTCTGCAAGAAGCGCCCGAAGCCTGGAGGATGGAACACTGGGGG
CCTACGACCAAGAGAAACACCGGTGTACCTCACTGGACCCGGAGACGTTCTTCGCGGGCTTCGGACCTCCTACCTTGTGACCCCC
340
PRNP
PRNP-201
10 15 20 25 30 35
W M L V L F V A T W S D L G L C K K R P K P G G W N T G G
PRNP-201
CAGCCGATACCCGGGGCAGGGCAGCCCTGGAGGCAACCGCTACCCACCTCAGGGCGGTGGTGGCTGGGGGCAGCCTCATGGTGGT
GTCGGCTATGGGCCCCGTCCCGTCGGGACCTCCGTTGGCGATGGGTGGAGTCCCGCCACCACCGACCCCCGTCGGAGTACCACCA
425
PRNP
PRNP-201
40 45 50 55 60
S R Y P G Q G S P G G N R Y P P Q G G G G W G Q P H G G
PRNP-201
GGCTGGGGGCAGCCTCATGGTGGTGGCTGGGGGCAGCCCCATGGTGGTGGCTGGGGACAGCCTCATGGTGGTGGCTGGGGTCAAG
CCGACCCCCGTCGGAGTACCACCACCGACCCCCGTCGGGGTACCACCACCGACCCCTGTCGGAGTACCACCACCGACCCCAGTTC
510
PRNP
PRNP-201
65 70 75 80 85 90
G W G Q P H G G G W G Q P H G G G W G Q P H G G G W G Q
PRNP-201
GAGGTGGCACCCACAGTCAGTGGAACAAGCCGAGTAAGCCAAAAACCAACATGAAGCACATGGCTGGTGCTGCAGCAGCTGGGGC
CTCCACCGTGGGTGTCAGTCACCTTGTTCGGCTCATTCGGTTTTTGGTTGTACTTCGTGTACCGACCACGACGTCGTCGACCCCG
595
PRNP
PRNP-201
95 100 105 110 115 120
G G G T H S Q W N K P S K P K T N M K H M A G A A A A G A
PRNP-201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680
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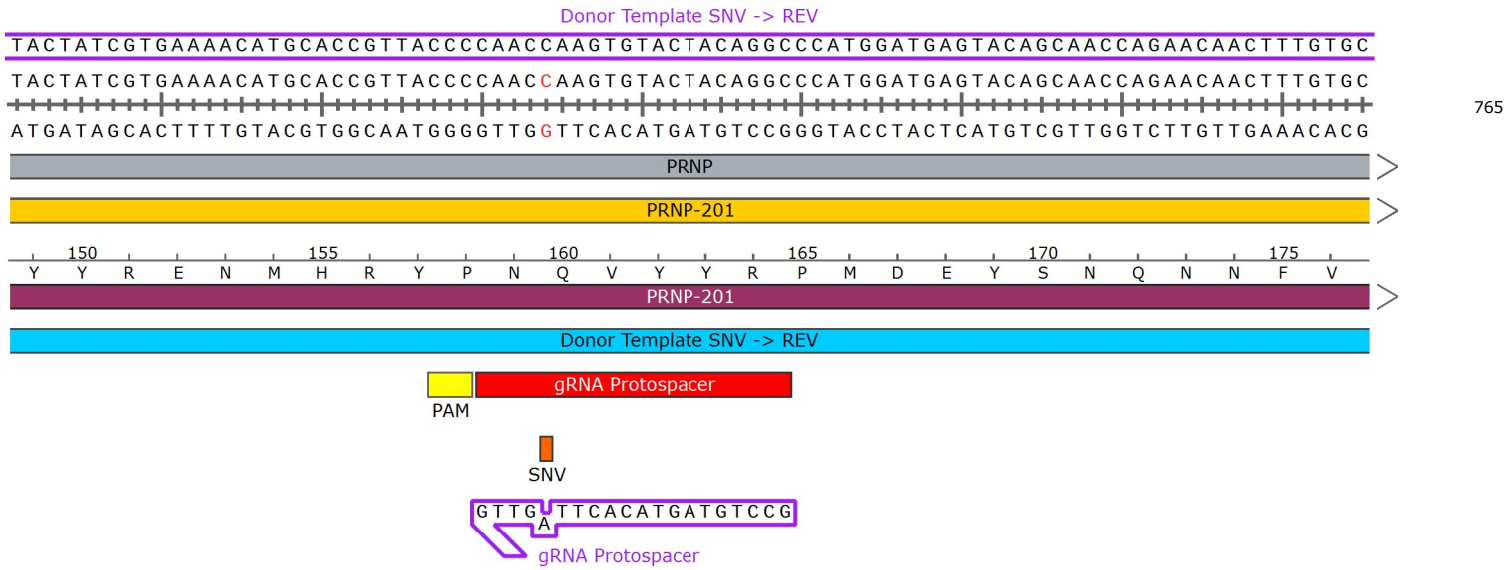
PRNP
PRNP-201
125 130 135 140 145
V V G G L G G Y M L G S A M S R P I I H F G S D Y E D R
PRNP-201
Donor Template SNV -> REV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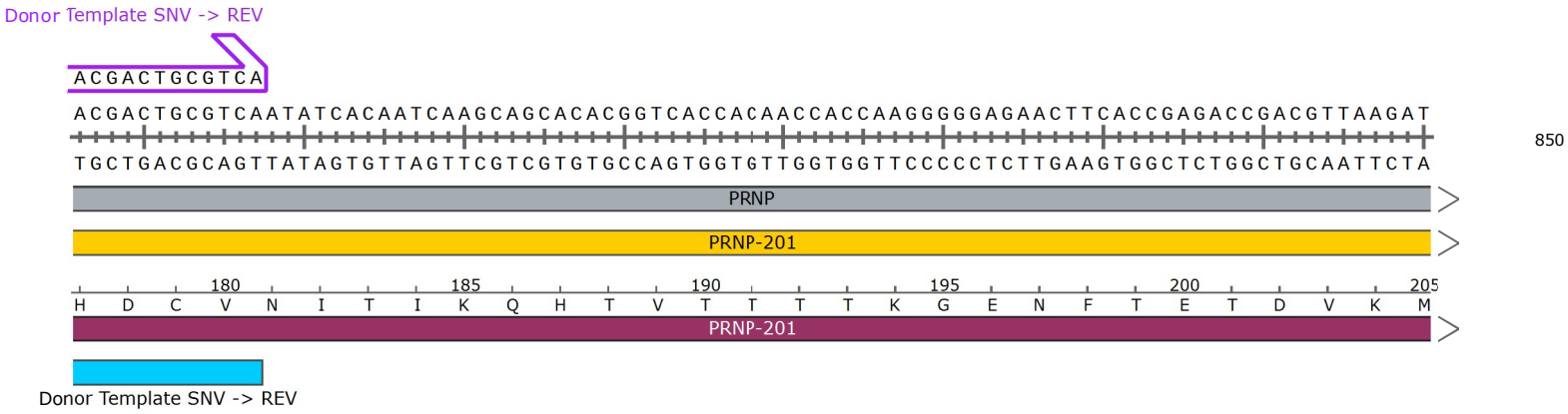
765
ATGATAGCACTTTTGTACGTGGCAATGGGGTTGGTTCACATGATGTCCGGGTACCTACTCATGTCGTTGGTCTTGTTGAAACACG
PRNP
PRNP-201
150 155 160 165 170 175
Y Y R E N M H R Y P N Q V Y Y R P M D E Y S N Q N N F V
PRNP-201
Donor Template SNV -> REV
gRNA Protospacer
PAM
SNV
GTTGATTCACATGATGTCCG
gRNA Protospacer


Donor Template SNV -> REV
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ACGACTGCGTCAATATCACAATCAAGCAGCACACGGTCACCACAACCACCAAGGGGGAGAACTTCACCGAGACCGACGTTAAGAT
850
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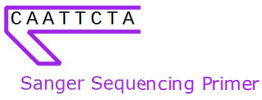
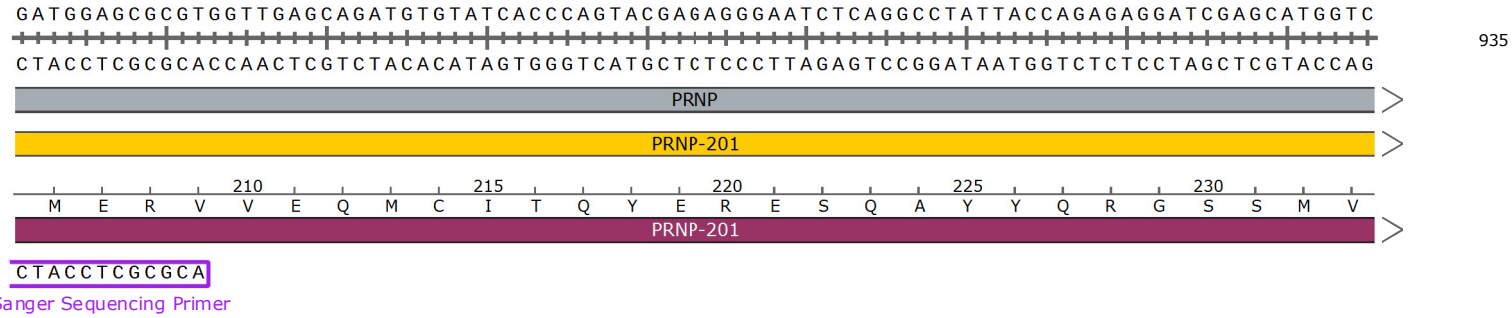
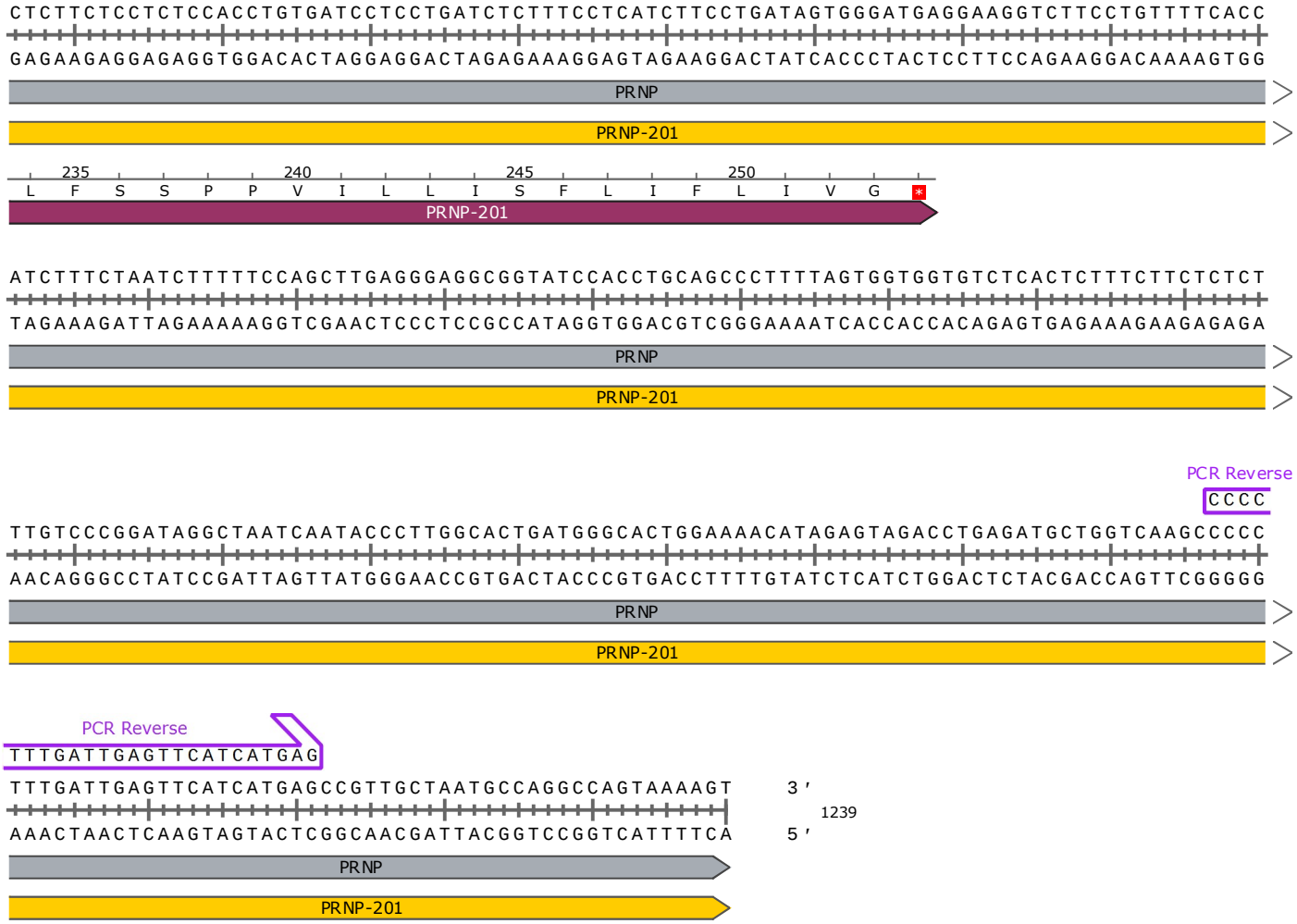
PRNP
PRNP-201
180 185 190 195 200 205
H D C V N I T I K Q H T V T T T T K G E N F T E T D V K M
PRNP-201
Donor Template SNV -> REV


CAATTCTA
Sanger Sequencing Primer


GATGGAGCGCGTGGTTGAGCAGATGTGTATCACCCAGTACGAGAGGGAATCTCAGGCCTATTACCAGAGAGGATCGAGCATGGTC
935
CTACCTCGCGCACCAACTCGTCTACACATAGTGGGTCATGCTCTCCCTTAGAGTCCGGATAATGGTCTCTCCTAGCTCGTACCAG
PRNP
PRNP-201
210 215 220 225 230
M E R V V E Q M C I T Q Y E R E S Q A Y Y Q R G S S M V
PRNP-201
CTACCTCGCGCA
Sanger Sequencing Primer


CTCTTCTCCTCTCCACCTGTGATCCTCCTGATCTCTTTCCTCATCTTCCTGATAGTGGGATGAGGAAGGTCTTCCTGTTTTCACC
1020
GAGAAGAGGAGAGGTGGACACTAGGAGGACTAGAGAAAGGAGTAGAAGGACTATCACCCTACTCCTTCCAGAAGGACAAAAGTGG
PRNP
PRNP-201
235
240
245
250
L F S S P P V I L L I S F L I F L I V G *
PRNP-201
ATCTTTCTAATCTTTTTCCAGCTTGAGGGAGGCGGTATCCACCTGCAGCCCTTTTAGTGGTGGTGTCTCACTCTTTCTTCTCTCT
1105
TAGAAAGATTAGAAAAAGGTCGAACTCCCTCCGCCATAGGTGGACGTCGGGAAAATCACCACCACAGAGTGAGAAAGAAGAGAGA
PRNP
PRNP-201
PCR Reverse
CCCC
TTGTCCCGGATAGGCTAATCAATACCCTTGGCACTGATGGGCACTGGAAAACATAGAGTAGACCTGAGATGCTGGTCAAGCCCCC
1190
AACAGGGCCTATCCGATTAGTTATGGGAACCGTGACTACCCGTGACCTTTTGTATCTCATCTGGACTCTACGACCAGTTCGGGGG
PRNP
PRNP-201
PCR Reverse
TTTGATTGAGTTCATCATGAG
TTTGATTGAGTTCATCATGAGCCGTTGCTAATGCCAGGCCAGTAAAAGT 3′
1239
AAACTAACTCAAGTAGTACTCGGCAACGATTACGGTCCGGTCATTTTCA 5′
PRNP
PRNP-201

| | Feature | | | Location | Size | | | Type |
|---|---|---|---|---|---|---|---|---|
| ✓ | **PRNP** | | | 1 .. 1239 | 1239 bp | | → | gene |
| | /note | = | gene ENSG00000171867<br>Protein coding | | | | | |
| ✓ | **PRNP-201** | | | 1 .. 1239 | 1239 bp | | → | prim_transcript |
| | /note | = | primary transcript ENST00000379440 | | | | | |
| | **PRNP-202** | | | 1 .. 1239 | 1239 bp | | → | prim_transcript |
| | /note | = | primary transcript ENST00000424424 | | | | | |
| | **PRNP-203** | | | 1 .. 1239 | 1239 bp | | → | prim_transcript |
| | /note | = | primary transcript ENST00000430350 | | | | | |
| | **PRNP-204** | | | 1 .. 1239 | 1239 bp | | → | prim_transcript |
| | /note | = | primary transcript ENST00000457586 | | | | | |
| ✓ | **PRNP-201** | | | 237 .. 998 | 762 bp | | → | CDS |
| | /note | = | coding sequence ENSP00000368752 | | | | | |
| | /translation | = | MANLGCWMLVLFVATWSDLGLCKKRPKPGGWNTGGSRYPGQGSPGGNRYPPQGGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQGGGTHSQWNKPSKPKTNMKHMA<br>GAAAAGAVVGGLGGYMLGSAMSRPIIHFGSDYEDRYYRENMHRYPNQVYYRPMDEYSNQNNFVHDCVNITIKQHTVTTTTKGENFTETDVKMMERVVEQMCITQYERESQAYY<br>QRGSSMVLFSSPPVILLISFLIFLIVG*<br>253 amino acids = 27.7 kDa | | | | | | |
| | **PRNP-202** | | | 237 .. 998 | 762 bp | | → | CDS |
| | /note | = | coding sequence ENSP00000411599 | | | | | |
| | /translation | = | MANLGCWMLVLFVATWSDLGLCKKRPKPGGWNTGGSRYPGQGSPGGNRYPPQGGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQGGGTHSQWNKPSKPKTNMKHMA<br>GAAAAGAVVGGLGGYMLGSAMSRPIIHFGSDYEDRYYRENMHRYPNQVYYRPMDEYSNQNNFVHDCVNITIKQHTVTTTTKGENFTETDVKMMERVVEQMCITQYERESQAYY<br>QRGSSMVLFSSPPVILLISFLIFLIVG*<br>253 amino acids = 27.7 kDa | | | | | | |
| | **PRNP-203** | | | 237 .. 998 | 762 bp | | → | CDS |
| | /note | = | coding sequence ENSP00000399376 | | | | | |
| | /translation | = | MANLGCWMLVLFVATWSDLGLCKKRPKPGGWNTGGSRYPGQGSPGGNRYPPQGGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQGGGTHSQWNKPSKPKTNMKHMA<br>GAAAAGAVVGGLGGYMLGSAMSRPIIHFGSDYEDRYYRENMHRYPNQVYYRPMDEYSNQNNFVHDCVNITIKQHTVTTTTKGENFTETDVKMMERVVEQMCITQYERESQAYY<br>QRGSSMVLFSSPPVILLISFLIFLIVG*<br>253 amino acids = 27.7 kDa | | | | | | |
| | **PRNP-204** | | | 237 .. 998 | 762 bp | | → | CDS |
| | /note | = | coding sequence ENSP00000415284 | | | | | |
| | /translation | = | MANLGCWMLVLFVATWSDLGLCKKRPKPGGWNTGGSRYPGQGSPGGNRYPPQGGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQGGGTHSQWNKPSKPKTNMKHMA<br>GAAAAGAVVGGLGGYMLGSAMSRPIIHFGSDYEDRYYRENMHRYPNQVYYRPMDEYSNQNNFVHDCVNITIKQHTVTTTTKGENFTETDVKMMERVVEQMCITQYERESQAYY<br>QRGSSMVLFSSPPVILLISFLIFLIVG*<br>253 amino acids = 27.7 kDa | | | | | | |
| ✓ | **Donor Template SNV -> REV** | | | 678 .. 777 | 100 bp | | ⊢⊣ | misc_feature |
| ✓ | **PAM** | | | 707 .. 709 | 3 bp | | ⊢⊣ | misc_feature |
| ✓ | **gRNA Protospacer** | | | 710 .. 729 | 20 bp | | ⊢⊣ | misc_feature |
| ✓ | **SNV** | | | 714 .. 714 | 1 bp | | ⊢⊣ | misc_feature |
| | /note | = | SNV = T<br>REV = C | | | | | |

| | Primer | Length | Binding Sites | | Tm | Date Added |
|---|---|---|---|---|---|---|
| ✓ | **PCR Forward** | 25-mer | 188 .. 212 | → | 58°C | Jun 14, 2023 |
| | /sequence = TAAATATGGGACTCTGACGTTCTCC<br>44% GC / 7632.0 Da | | | | | |
| ✓ | **Donor Template SNV -> REV** | 100-mer | 678 .. 777 | → | 77°C | Jun 14, 2023 |
| | /sequence = CGTTACTATCGTGAAAACATGCACCGTTACCCCAACCAAGTGTACTACAGGCCCATGGATGAGTACAGCAACCAGAACAACTTTGTGCACGACTGCGTCA<br>49% GC / 30,702.0 Da | | | | | |
| ✓ | **gRNA Protospacer** | 20-mer | 710 .. 729 | ← | 45°C | Jun 14, 2023 |
| | /sequence = GCCTGTAGTACACTTAGTTG<br>45% GC / 6123.1 Da | | | | | |
| ✓ | **Sanger Sequencing Primer** | 20-mer | 843 .. 862 | ← | 57°C | Jun 14, 2023 |
| | /sequence = ACGCGCTCCATCATCTTAAC<br>50% GC / 5997.0 Da | | | | | |
| ✓ | **PCR Reverse** | 25-mer | 1187 .. 1211 | → | 58°C | Jun 14, 2023 |
| | /sequence = CCCCTTTGATTGAGTTCATCATGAG<br>44% GC / 7623.0 Da | | | | | |