

JIPSC1032_SnappeneDNA_INK2J00078_PFN1_C71G_SNVSNV
 3410 bp

C G G G C G C G C T C C C G T G C A G C C G G C T C G G G C C C G A C C G C C C A T G C A C T C C C G G C C C G G C G C A G G C G C A G G C G C G G G C A C A C G C C C G C C G C C C G G T C C T C C C T T C G G C G G A G G T G G G G A A G G A G T
G C C C G C G C G A G G G C A C G T C G G C C G A G C C G G G C T G G C G G G T A C G T A G G G C C G G G C G C T C C G C G T C C G C G C C G T G T G C G G G C G G G G C G G C A G G A A G G A A G C C G C T C C A C C C C T T C C T C C T C A

135

PFN1

C A T C C G T T T A A C C T G G G C T C C C G A A C T C C T T A A T T T G C T A A T T T G C A G C T T G C T A A T T C T C T G C T T T C T C T T C T T C T T C T T G G C T A C T C C T G C C C G A T A C C A A G T C T G G T T A T A T T C
G T A G G G C A A A T T G G G A C C C G A G G G G C T T G A G A G G A A T T A A A C G A T T T A A A C G T C G A A C G A T T A A G A G A C G A A A A G A G G A A G A A G A A G A C C G A G T G A G G G A C G G G C T A T G G T T C A G A C C A A A T A T A A G

270

PFN1

A G T G C A A A T T G G A G C A A A C C T A C C T T C A C C T C T C C C G C C A C C C C A T C C T T C T G C A T T G C T T T C C A T C G A A C T C T G C A A A T T T G C A A T A G G G G A G G G A T T T T A A A A T T G C A T T T G C A A A G T T C G G T G
T C A C G T T T A A C C T C G T T T G G G A T G G G A A G T G G A G A G A G G G C G T G G G G G T A G G A A G A C T A A C G A A A G G T A G C T T G A G A C G T T T A A A C G T T A T C C C C T C C C T A A A A A T T T A A C G T A A A C G T T T C A A G C C A C

405

PFN1

T C T G G G C T G G C G A G T G G G G A G G G A G G G A A T G G G A G T A G G C C C C G C C C T A C C G T C C T T T G C A A A T A A A A T C T A G C G G G C G G G G G G G G A G G A G C A G G A A G T G C C G T G C G A G G G C T G C T G C A C A G C G A G C
A G A C C C G A C C G C T C A C C C C T C C C T C C C T T A C C C C T C A T C C G G G C G G G A T G G C A G G A A C G T T A T T T T A G A T C G C C C C G C C C C C C C C C T C C T C G T C C T T A C C G C C A C G C T C C C G A C G A C G T G T C G C T C G

540

PFN1

PFN1-201

G G A G C C G G G T C C G G A G C G G A G C G C T G C C C G A G C T C T C C G C C T C C C C C G C C C G C C A G C C G A G C G A G C G C C G A G A G C A G C C C A G T A G C A G C C C A T G C C C G G
C C T C G C G C C A G G C C T G C C G T C G C G C A C G G G C T C A G A G G C G G A G G G G C G G G C G G T C G G C T C G A G C T C G G G T C A G G C C C G G G G T C G T C G T C G C G G C T C G T C G G G T C A T C G T C G C G G T A C C G G C C

675

PFN1

PFN1-201

M A G
ENSE0000...
PFN1-201

G T G G A A C G C C T A C A T C G A C A A C C T C A T G G C G G A C G G G A C C T G T C A G G A C G C G G C C A T C G T G G G C T A C A A G A C T C G C C C T C C G T C T G G G C C G C C G T C C C C G G A A A C G T T C G T C A A C A T C A C G G T A C T G C G A G G
C A C C T T G G G A T G T A G C T G T T G G A T A C C G C T C C C T G G A C A G T C C T G C C C G G T A G C A C C G A T G T T C T G A G C G G G A G C A G A C C C G G C G C A G G G G C C T T T T G C A A G C A G T T G T A G T G C C A T G A C G C T C C

810

PFN1

PFN1-201

5 10 15 20 25 30 35 40
W N A Y I D N L M A D G T C Q D A I V G Y K D S P S V W A A V P G K T F V N I T
ENSE00001324890
PFN1-201

C C T G C G C G G T C C G G G C A C T G C T C C G G T T T G G A C C C T G A G G G A G G G A C T T G G G T G G G G C G G G C G C G G T T A G G G C G C G A G C G A G A G G C C C T G A C T G G G T G C T T G C C C T G G A A G C G G C G C G A A T G G C G G T G C A
G G A C G C C C A G G C C C G T G A C G A G G C A A A C C T G G G A C T C C C T C C C T G A A C C A C C C C G C C G C C G C C A G A T C C C G C G C T C G C T C T C C G G A C T G A C C A C G A A C G G G A C C T T G C C C G C G C T T A C C G C C G A C T

945

PFN1

PFN1-201

PFN1-201

G T G A G T G G G T C C C T C A G T T G C C C G T A G G T C C T A T G C C C A G G C G G C G G C C C A T C C C G C C G G T A C C C C G C T T T C C G C G A C G G G G C G T T A C A T C C G G G C A C A G G G C G G G A G G G G C G C G C C C G G T G C G G
G C A C T A C C C A G G G A G T C A A C G G C A T C A G G A T A C G G G T C C G C C C G C G G G T A G G G C G G G C A T G G G C G A A A G G C G C T G C C C G C A A T G T A G G C C C G T G T C C C G C C C T C C C C G C C C G G G C C A C G C C

1080

PFN1

PFN1-201

PFN1-201

C G G C C A C T T C C G C C T C T C C A G G G C G G G C G G G A C G C G C C T A G T T T T A C T G G G A T T G G A T T G A G A G G G A C C C G G G A T C C T T G G A C C C C A G C T C C C G T C C G G T G C C A G C C C G C G T C C C T A C C A
G C C G G G T G A A G G C G G A G A G G G T C C C G C C C G C C C T G C G C G A G T C A A A A A T G A C C C T A A C C T A A C T C T C C C T G G G C C C T A G G A A C C T G G G G T C G A G G G C A G G C C G A C G G T G G G C G C A G G G A G A T G G T

1215

PFN1

PFN1-201

PFN1-201

T T G T T T C T C T G G T G C G G A A G G A G C C C A G G C G G T G G T C T T G G T C C C T T G C C A C C C T C T G T G G G C T T C T G C C C C T C T A A C T C C G T T A G A G A G G G C A G G C C A C A C G C C C C C A G C T A G C A C G T T G
A A C A A G A G G A C C A C G C C T T C C C T C G G G T C C G C G A C C A G A A C A G G A A C G G G T G G A G A C A C C G A A G A C C G G G A G G A T T G A G G C A A T C T C C C G C T C C G T G G T G T G C G G G G G T C G A G T C G T G C A A C

1350

PFN1

PFN1-201

PFN1-201

G A T T C A A C A T T C C T G C G A G G C C A A T C C C G G A A G T C C C C T C G C C C T C C C T C C C G C C A T C C G G C G G G C C T G G A G C A G G G A A C T T T G T G A G A G T T C T G A G A C A G C A T A A G C G A A A G T A T A T T G G T T A C T A C C G
C T A A G T T G T A A G G A C G C T C C G G T T A G G G C C T T C A G G G A G C G G G A G G A A G G G C G G T A G G C C G C C C G G A C C T C G T C C C C T T G A A A C A C T C T T C A A G A C T C T G C G T A T T C G C T T T C A T A T A A C C A A A T G A T G G C

1485

PFN1

PFN1-201

PFN1-201

C T G C T C C C A C C A C C A T C T C C C T G T C C A C A C T G C C C G G A A G T G G G A G G G G A G C G G A A G T T C A A A A G G G G G G A A G G G G T T T C C G G C G G A G G G A C C G G A T G T G G G G C T T G G G G T G A A A G G G G A G G G G
G A C G A G G G T G G T G T A G A G G G A C A G G T G T G A C G G G C T T C A C C C C T C C C C T C G C C T T C A A G T T T T C C C C C C T T C C C C A A G G C C C G C C C T C C C C T G G C T A C A C C C C G A A C C C A C T T T C C C C T C C C C C

1620

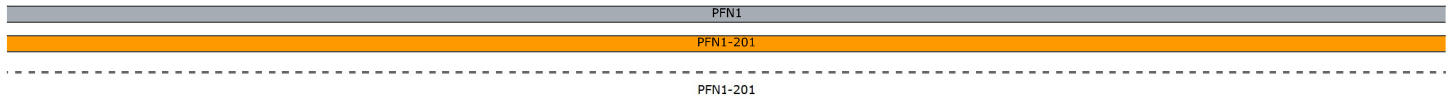
PFN1

PFN1-201

PFN1-201

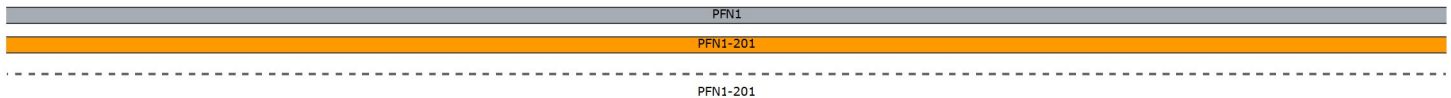
GAAAGGTTCCCGGGTACCTAGACCAGAGAGCTGGCCCTGCCGGTCTGGCCCTTCAAAAGTTTCCAACTTTCCGAAAGCCCCAGGGGCTGCTTCCCTCATCTCAGAGCAGAGATACCTGGAG
CTTTCCAAGGCCCATGATCTGGGCTCTCGACCGGACGGCCAGACCGGGGACAGGTGGAAGTTTCAAAAGTTGAAAGGGCCTTTCGGGGTCCCCAGACGAAGGATAGAGTCTCGTCTCTATGGACCTC

1755



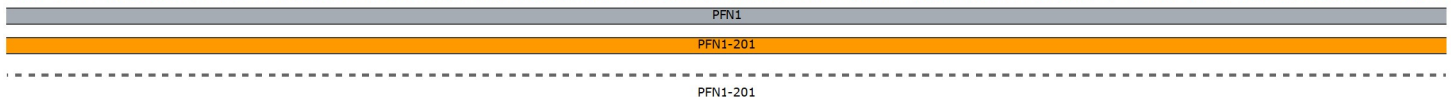
CTAAACTCTAGGTTACTTGGAGACCCAGGCGTCCGGGCCCTAACAGCTCCTGCAGAACCTTGGACCAATAAGGGCAAAGTTGCTTCTCTTGCCTGCCCCGCCCTCCCTCCCTCTCCGCTTCTGCTTTTC
GATTTGAGATCCAATGAACCTCTGGGTCGCGAGGCCGGGATTGTGAGGACGCTTGGAACTGGTTTATTCCGTTTCAACGAAGAGAACGGAGCGGGCGGGGGAGGGAAGGGGAGAGGCAGAACGAAAAG

1890



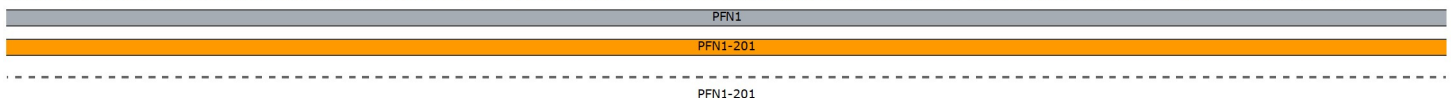
CTGAAGGAGAGTTCTGAGCATCCAAAGGCTCCTCACTTACCTCACTGACTCCCTTTATTTCTGGGTTTACTTTCCCATTAACACTGACATCTAAATCTCTAGAGGATATGTCATCCCTTCCCTGTTTC
GACTTCTCTCAAGACTCGTAGGTTTCCGAGGAGTGAATGGAGTACTGAGGAAATAAAGGACCAAAATGAAAGGGTAATTGTGACTGTAGATTTAGAGATCTCTCATACAGTAGGGAAGGAGGACCAAGG

2025



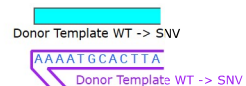
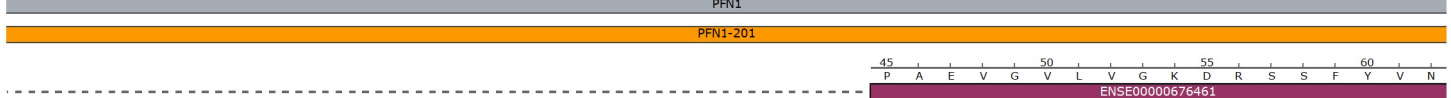
ATATTCTAAGTTTCAGAAATCATGATCTTTTTCTGCACTAACGTCCACAGTCTCAGAGTTTCTCACAGTTTCTGATGTTGACTGAGTATATAATTTATACTTAGCCCCACGGCGGGGTGGTTCTCAGAAAGT
TATAAGATTCAAAGTCTTAGTACTAGAAAAAGACGTGATTGCAGGGTGTGAGGAGTCTCAAAGAGTGTCAAGTAACTACACATGACTCATATATAAATATGAATCGGGGTGCCGCCACCACAGAGTCTTAC

2160



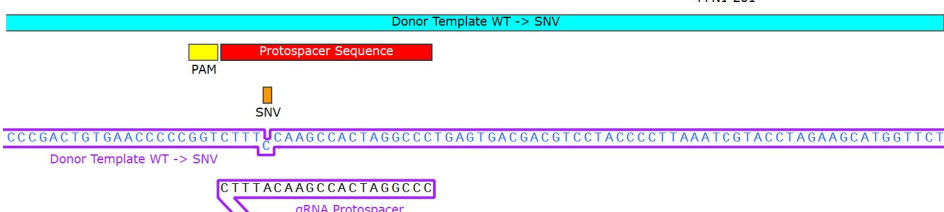
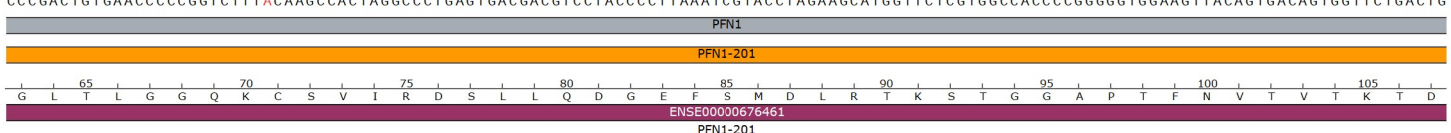
GAAAGACAGGTGGGCTTTGGAGAACACGGTGGGAATCTTGGTGCCTGACTAACTTGATGGGCGCTTGGTTCTCTTCCAGCCAGCTGAGGTGGGTGCTCGTTGGCAAAGACCGGTCAAGTTTTACGTGAAT
CTTCTGTCCACCAGAAACCTCTTGTGCCACCTTAGAACACGCTGACTGATTGAACACCGCGAACCAAGGAGAAGGTCGGTGCCTCCACCACAGGACCAACCGTTTCTGGCCAGTTCAAAAATGCACTTA

2295



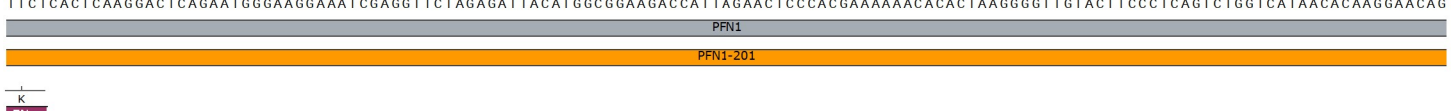
GGGCTGACACTTGGGGCCAGAAAATGTTCCGGTATCCGGGACTCACTGCTGACGAGTGGGAAATTTAGCATGGATCTTCTGACCAAGAGCACCGGTGGGGCCCCACCTTCAATGTCAGTGTACCAAGACTGAC
CCC.GACTGTGAACCCCGGCTTTACAAGCCACTAGGCCCTGAGTGACGACGCTCCTACCCCTTAAATCGTACCTAGAAGCATGGTTCTCGTGGCCACCCGGGGGTGGAAGTTACAGTGACAGTGGTTCTGACTG

2430



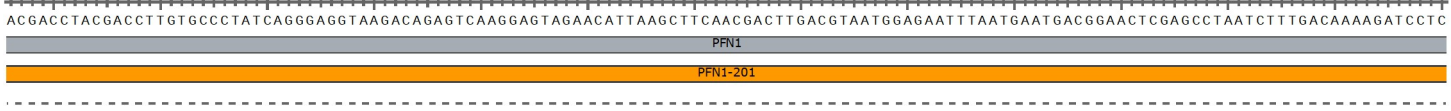
AAGAGTGAGTTCTGAGTCTTACCCTCCCTTACGTCCTAATGTACCGCTTCTGGTAATCTTGGGGTCTTTTTTGTGATTCCCAACATGAAGGGAGTCAGACCAGTATTGTCTTCTGTC
TTCTCACTCAAGGACTCAGAAATGGGAAGGAAATCGAGGTTCTAGAGATTACATGGCGGAAGACCTTAGAACTCCACGAAAAACACACTAAGGGGTTGACTTCCCTCAGTCTGGTCATAACACAAGGAACA

2565



TGCTGGATGCTGGAACACGGGATAGTCCCTCCATTCTGCTCAGTTCCCTCATCTTGAATTCGAAGTTGCTGAAGTGCATTACCTCTTAAATTACTTACTGCCTTGAGCTCGGATTAGAACTGTTTTCTAGGAG
ACGACCTACGACCTTGTGCCCTATCAGGGAGGTAAGACAGAGTCAAGGAGTGAACATTAAGCTTCAACGACTTGACGTAATGGAAGATTTAATGAATGACGGAACCTCGAGCCTAATCTTTGACAAAAGATCCTC

2700



TATAGGTAGATTGTTGGGGTCTTGAATCATCGAGTTTCATCGTTTGAAGTTCTTTTGGTTAGAACCTGGAGGTGGCATGCACATCCACAGCCCTTTCTAGCCTGAACACATGAATCAACAGTCTATGAGCCTTTGACC
ATATCCATCTAACAAACCCAGAACTTAGTAGCTCAAGTAGCAAACCTCAAGAAAAAATCTTGGACCTCCACCGTACGTGTAGGTGTCGGGAAAGATCGGACTTGTGTACTTGTGTGTCAGATACTCGGAAACTGG

2835

PFN1

PFN1-201

GTAGCTCAAGTAGCAAACCTCAAGAA
PCR Reverse

PFN1-201

CCTAAGTTTTAGTCTGTTCCCTCTCCAGCGTTTAAGCTTGATTTTCCCTCTTTTGAAGAACCTTATTGTTTCAGGGTGACTGACAGCCTGCCTGTGTGGTGGGGGGCGGGTTGGGAGAGATGAGGTTGGGTTA
GGATTCAAAAATCAGACAAGGAGAGGTCGCAAAATCGAACTAAAAGGAGAAAACCTTTTCGGAATAACAAAGTCCCACTGACTGTCGGACGGACACACACCACCCCGCCCAACCTCTCTACTCCAACCCAAT

2970

PFN1

PFN1-201

PFN1-201

CAGCCCCAGGGCTGGACAGCTGCTGAACAGCTGGCAGGGGGTGAATTGTGACACCTGGATCTTAGCCTCCTTTCTCTTCTCCTCCTCCAGCGCTAGTCTGCTGATGGGCAAGAAAGGTGCCACGGTGGT
GTCGGGGTCCCGACCTGTCGACGACTTGTGACCGTCCCCACCTTAACACTGTGGACCTAGGATCGGAGGAAAGAGAAAGGAGGAGGATCGCGATCAGGACGACTACCCGTTCTTCCACAGGTGCCACCA

3105

PFN1

PFN1-201

T 110 V L L M G K E G V H G G
ENSE00001488299

PFN1-201

TTGATCAACAAGAAATGTTATGAAATGGCCTCCACCTTCGGCGTTCCAGTACTGACCTCGTCTGTCCCTTCCCTTCCAGCTCCCCACAGCTTTGACCCCTTTCTCCTCCCAACACACAAACATTTTA
AACTAGTTGTTCTTTACAATACTTTACCGAGGGTGGAGCCGCAAGGGTCACTGACTGGAGCAGACAGGGAAGGGGAGTGGCGAGGGGTGTCGAAACGTGGGAAAGGAGGGGTATGTGTGTGTTTGGTAAAT

3240

PFN1

PFN1-201

L 125 I N K K C Y E M A S H L R R S Q Y 140
ENSE00001488299
PFN1-201

TTTTTGGGCCATTACCCCATACCCCTTATTGCTGCCAAAACCACATGGGCTGGGGGCCAGGGCTGGATGGACAGACACCTCCCCCTACCCATATCCCTCCCGTGTGTGGTTGAAAACTTTTGTGTTTTGGGGT
AAAAAACCCGGTAATGGGGTATGGGGAATAACGACGGTTTTGGTGTACCCGACCCCGGTCGACCTACCTGTCTGTGGAGGGGATGGGTATAGGAGGGCACACACCAACCTTTTAAAAACAAAAACCCA

3375

PFN1

PFN1-201

TTTTTTTTCTGAATAAAAAAGATTCTACTAACAA 3'
3410
AAAAAAAAAGACTTATTTTTCTAAGATGATTGTT 5'
PFN1
PFN1-201

Feature	Location	Size	Color	Strand	Type
PFN1	1 .. 3410	3410 bp	■	→	gene
/note	= gene ENSG00000108518 Protein coding				
PFN1-202	1 .. 2369	2369 bp	■	→	prim_transcript
/note	= primary transcript ENST00000572383				
PFN1-202	43 .. 2369	2327 bp	■	→	CDS
▶ 3 segments = 497 bp					
/note	= coding sequence ENSP00000460363				
/translation	= MHSRPRRRRRRGGHTRRRPPVLPFGG,,GSGGARAAAQRAEPRSGRQRVPRALRLPPPASRGSSSPVIRGPPSSSAESSPSSSAMAGWNAIDNLMADGTCQDAAIIVGYKDPSPVWAAVPGKTFVNIT,,PAEVGLVVGKDRSSFY YNSHLLGGQKCSVIRDSLLQDGEFSM				
PFN1-201	532 .. 3410	2879 bp	■	→	prim_transcript
/note	= primary transcript ENST00000225655				
PFN1-201	668 .. 3162	2495 bp	■	→	CDS
▶ 3 segments = 423 bp					
/note	= coding sequence ENSP00000225655				
/translation	= MAWNAIDNLMADGTCQDAAIIVGYKDPSPVWAAVPGKTFVNIT,,PAEVGLVVGKDRSSFYVNGLTGGQKCSVIRDSLLQDGEFSMDLRTKSTGGAPTFNVTVTKTDK,,TLVLLMGKEGVHGGLINKKCYEMASHLRRSQ Y40 amino acids = 15.1 kDa				
PFN1-203	1593 .. 3395	1803 bp	■	→	prim_transcript
/note	= primary transcript ENST00000574872				
PFN1-203	2218 .. 3162	945 bp	■	→	CDS
▶ 2 segments = 315 bp					
/note	= coding sequence ENSP00000465019				
/translation	= MGAWFLQPAEVGLVVGKDRSSFYVNGLTGGQKCSVIRDSLLQDGEFSMDLRTKSTGGAPTFNVTVTKTDK,,TLVLLMGKEGVHGGLINKKCYEMASHLRRSQY* 104 amino acids = 11.4 kDa				
Donor Template WT -> SNV	2284 .. 2383	100 bp	■	↔	misc_feature
PAM	2313 .. 2315	3 bp	■	↔	misc_feature
Protospacer Sequence	2316 .. 2335	20 bp	■	↔	misc_feature
SNV	2320 .. 2320	1 bp	■	↔	misc_feature
/note	= WT=T SNV=G				
ENO3-204	2852 .. 970	1529 bp	■	←	prim_transcript
/note	= primary transcript ENST00000519266 Protein coding				
ENO3-209	6158 .. 48204,965,359 bp	■	←	prim_transcript	
/note	= primary transcript ENST00000520221 Protein coding				
ENO3	8069 .. 48204,963,608 bp	■	←	gene	
/note	= gene ENSG00000108515 Protein coding				

Primer	Length	Binding Sites	Tm	Date Added
✓ PCR Forward /sequence = GAATCTTGGTGCACTGACTAACTTG 44% GC / 7672.1 Da	25-mer	2193 .. 2217	58°C	Jun 14, 2022
✓ Sanger Sequencing Primer /sequence = ACTAACTTGATGGGCGCTTG 50% GC / 6148.1 Da	20-mer	2209 .. 2228	58°C	Jun 14, 2022
✓ Donor Template WT -> SNV /sequence = TCTTGGTACGAAGATCCATGCTAAATCCCCTCCTGCAGCAGTGAGTCCCGGATCACCGAACCTTTCTGGCCCCCAAGTGCAGCCATTACGTAAAA 52% GC / 30,562.8 Da	100-mer	2284 .. 2383	77°C	Jun 14, 2022
✓ gRNA Protospacer /sequence = CCCGGATCACCGAACATTTT 55% GC / 6022.0 Da	20-mer	2316 .. 2335	59°C	Jun 14, 2022
✓ PCR Reverse /sequence = AAGAACTCAAACGATGAACTCGATG 40% GC / 7692.1 Da	25-mer	2728 .. 2752	58°C	Jun 14, 2022