

ENSE0...

PLAAT4-201

Donor Template WT -> SNV

gRNA Protospacer

SNV

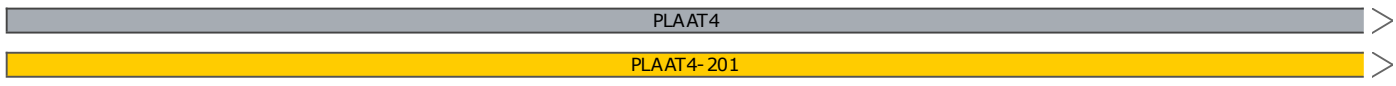
SNV

CZK2J00186_PLAAT4_I14T_A05_BB
1335 bp

5'
3'

TCTCAGGAAAGCCCTGCCACCTCTCTGATCCTCAGTTTCCCCATCTGTGCAATGGGATGATCATGCCTTCCCCTGGGGCTGTGGA
AGAGTCCTTTGGGACGGTGGAGAGACTAGGAGTCAAAGGGGTAGACACGTTACCCTACTAGTACGGAAGGGGACCCCGACACCT

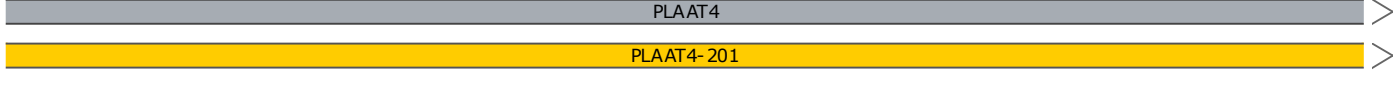
85



PCR Forward
tattgtaggacaagttcccacagag

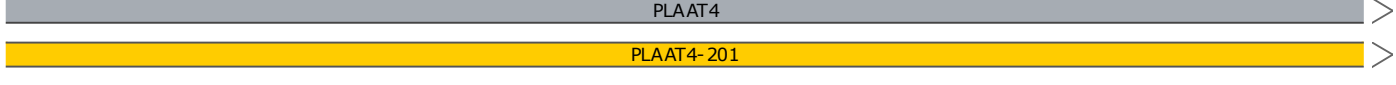
GATGGTGCAGTTATTGTAGGACAAGTTCCACAGAGGCCTGTTCTGTGAGTGCAGAGCCCCCTCAGTGCTGGGAGCTGGGGGGCC
CTACCACGTCAATAACATCCTGTTCAAGGGTGTCTCCGGACAAGACACTCACGTCTCGGGGGAGTCACGACCCTCGACCCCGG

170



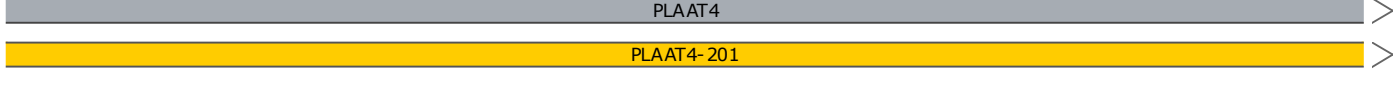
CCACAAGACCCCACTCAGGTCCCAGCAGGATGCTGTGAGCTCCTGTCTCCCAGGGTGTCTCTCCAAGAGATAGGTGTCTGAGG
GGTGTCTGGGGTGAGTCCAGGGTCTGCTACGACACTCGAGGACAGAGGGTCCCACAGTAGAGGTTCTCTATCCACAGGACTCC

255



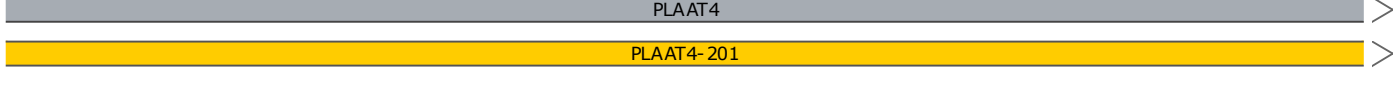
CTGGATGGGGCAAGGTCTGAGGAGGAGGTGGCTCTTGGGGCCATGGAGAGGCACAGGGCAGGAGTGATGAGGAACTGAGGGTCAG
GACCTACCCCGTTCCAGACTCCTCCTCCACCGAGAACCCCGGTACCTCTCCGTGTCCCGTCTCTACTACTCCTTGACTCCAGTC

340



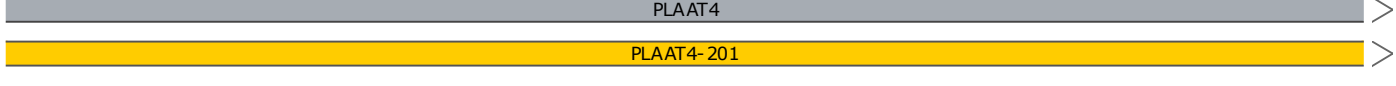
TCTGCAGAGGGCGGAGAGCTCAAGACTCACCTTCCCAGCCTTGCTCCTGGCCTCAGTGAAGGTGCTGGTTTCATGCAGGCTCTTGA
AGACGTCTCCCGCCTCTCGAGTTCTGAGTGGAAAGGGTCGGAACGAGGACCAGGAGTCACTTCCACGACCAAGTACGTCCGAGA

425



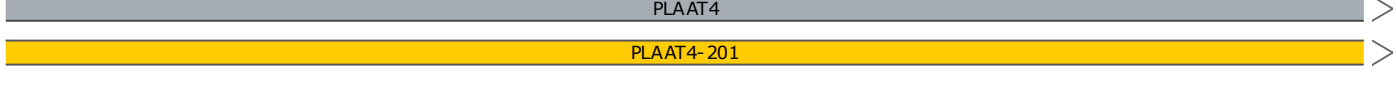
GTCGGCCTACTGAGGAGCATGTGTACAATGCACACATGCACACACATCTGCATCCTCAGCATGCACACACACAGCACACACATGT
CAGCCGGATGACTCCTCGTACACATGTTACGTGTGTACGTGTGTGTAGACGTAGGAGTCGTACGTGTGTGTGCTGTGTGTGTACA

510



CACACATGCGCCAGACGGTCTTCTGTCTCCCATCCCACAAGATCATTCTCCAGGCTTCCAGCCCCAGTGCCCCCACTGAGAA
GTGTGTACGCGGGTCTGCCAGGAAGACAGAGGGTAGGGTCTTAGTAAGAGGTCCGAAGGTCGGGGGTCACGGGGGTGACTCTT

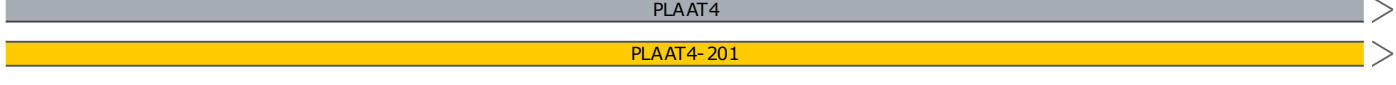
595



Sanger Sequencing Primer
atgaacatcagcaaggcgtc

GAGCCTTGAAAGTGACAGCAGGGCTGAGGATCTCATGGGGCTAGCAGCTGATGAACATCAGCAAGGCGTCTCCAGGATGAGCTG
CTCGGAGACTTCACTGTCGTCCCGACTCCTAGAGTACCCGATCGTCGACTACTTGTAGTCGTTCCGCAGAGGTCTACTCGAC

680



CAGCTCCCCAGCCAGGGTCTCTGCTGTTGCCTAGAAGGCCGGGTA CTCCATCTCTGGCTTTTCTGTTGCAGCCACACCAAGAGC
GTCGAGGGGGTTCGGTCCCAGAGACGACAACGGATCTTCCGGCCCATGAGGTAGAGACCGAAAAGACAACGTCGGTGTGGTTCTCG

765

PLAAT4

PLAAT4-201

5
P H Q E
ENSE00000908980
PLAAT4-201

Donor Template WT -> SNV

CTCG

Donor Template WT -> SNV

gRNA Protospacer

CTGATTGAGATTTTCCGCCT

CCAAACCTGGAGACCTGATTTGAGATTTTCCGCCTTGGCTATGAGCACTGGGCCCTGTATATAGGAGATGGCTACGTGATCCATCT
GGTTTGGACCTCTGGACTAACTCTAAAAGGCCGGAACCGATACTCGTGACCCGGGACATATATCCTCTACCGATGCACTAGGTAGA

850

PLAAT4

PLAAT4-201

10 15 20 25 30 35
P K P G D L I E I F R L G Y E H W A L Y I G D G Y V I H L

ENSE00000908980

PLAAT4-201

Donor Template WT -> SNV

gRNA Protospacer

PAM

SNV

GGTTTGGACCTCTGGACTAACTCTAAAAGGCCGGAACCGATACTCGTGACCCGGGACATATATCCTCTACCGATGCACTAGGTAGA

Donor Template WT -> SNV

GGCTCCTCCAAGTAAGGACTGATGAATATATAATTTTCAAATATTTGTTAAAAGGATAATGAGAGGGCCGGGCACGGTGGCTCA
CCGAGGAGGTTTCATTCTGACTACTTATATATTTAAAAGTTTATAAACAATTTTCTATTACTCTCCCGGCCCGTGCCACCGAGT

935

PLAAT4

PLAAT4-201

A P P S K D *
ENSE0000090...
PLAAT4-201

Donor Template WT -> SNV

CCGAGGAGGTT

Donor Template WT -> SNV

TGCCTGTAATCCCAGCACTTTGAGAGGCCGAGGTGGGCAGATTACCTGAGGTCAGGAGTTCAAGACCAGACTGACCAACATGGAG
ACGGACATTAGGGTCGTGAAACTCTCCGGCTCCACCCGTCTAATGGACTCCAGTCTCAAGTTCTGGTCTGACTGGTTGTACCTC

1020

PLAAT4

PLAAT4-201

AAACCCCATCTCTACTAAAAATACAAAATTAGCCAGGTGTGGTGGCACACACCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAG
TTTGGGGTAGAGATGATTTTTATGTTTTAATCGGTCCACACCACCGTGTGTGGACATTAGGGTCGATGAGTCTCCGACTCCGCTC

1105

PLAAT4

PLAAT4-201

GAGAATCACTTGATCCCCGGAGGCAGAGGTTGCAGTGAGCCGAGATCGTGCCATTGCACTCTAGCCTGGGCAACAAGAGCAAAAC
CTCTTAGTGAAGTAGGGGCCTCCGTCTCCAACGTCCTCGGCTCTAGCACGGTAACGTGAGATCGGACCCGTTGTTCTCGTTTTG

1190

PLAAT4

PLAAT4-201

TTGATCTCAAAAAATAAAAAATAAGTCAATGAGAGCCACTGAAAGACAGTTAAGCAAGGGAAACTTGAGTTAGGAGACACATTC
AACTAGAGTTTTTTATTTTTTTATTCAGTTACTCTCGGTGACTTTCTGTCAATTCGTTCCCTTTGAAGTCAATCCTCTGTGTAAG

1275

PLAAT4

PLAAT4-201

gtcaattcgttccctttgaactcaa

PCR Reverse

TTCTTAGAGGATGCTTGATGAGATTGCACACACATATGTCCCATGAAGTAGACACAGTGC
AAGAATCTCCTACGAACTACTCTAACGTGTGTGTATACAGGGTACTTCATCTGTGTCACG

3'

1335

5'

PLAAT4

PLAAT4-201

Feature	Location	Size	Start	End	Type
✓ PLAAT4	1 .. 1335	1335 bp	■	→	gene
/note	= gene ENSG00000133321 Protein coding				
✓ PLAAT4-201	1 .. 1335	1335 bp	■	→	prim_transcript
/note	= primary transcript ENST00000255688				
PLAAT4-202	1 .. 1335	1335 bp	■	→	prim_transcript
/note	= primary transcript ENST00000354445				
PLAAT4-203	1 .. 1335	1335 bp	■	→	prim_transcript
/note	= primary transcript ENST00000439013				
PLAAT4-204	1 .. 1335	1335 bp	■	→	prim_transcript
/note	= primary transcript ENST00000537871 protein_coding_CDS_not_defined				
PLAAT4-205	1 .. 1335	1335 bp	■	→	prim_transcript
/note	= primary transcript ENST00000544107 protein_coding_CDS_not_defined				
✓ PLAAT4-201	753 .. 861	109 bp	■	→	CDS
/note	= coding sequence ENSP00000255688				
/translation	= PHQEPKPGDLIEIFRLGYEHWALYIGDGYVIHLAPP 36 amino acids = 4.1 kDa				
PLAAT4-203	753 .. 861	109 bp	■	→	CDS
/note	= coding sequence ENSP00000402943				
/translation	= PHQEPKPGDLIEIFRLGYEHWALYIGDGYVIHLAPP 36 amino acids = 4.1 kDa				
✓ Donor Template WT -> SNV	762 .. 861	100 bp	■	⌊	misc_feature
PLAAT4-202	763 .. 861	99 bp	■	→	CDS
/codon_start	= 1				
/note	= coding sequence ENSP00000346431				
/translation	= PKPGDLIEIFRLGYEHWALYIGDGYVIHLAPP 33 amino acids = 3.7 kDa				
✓ gRNA Protospacer	780 .. 799	20 bp	■	⌊	misc_feature
✓ SNV	784 .. 784	1 bp	■	⌊	misc_feature
/note	= WT = T SNV = C				
✓ PAM	800 .. 802	3 bp	■	⌊	misc_feature

Primer	Length	Binding Sites	Tm	Date Added
✓ PCR Forward /sequence = tattgtaggacaagttcccacagag 44% GC / 7690.1 Da	25-mer	97 .. 121 →	58°C	Oct 5, 2023
✓ Sanger Sequencing Primer /sequence = atgaacatcagcaaggcgtc 50% GC / 6135.1 Da	20-mer	647 .. 666 →	58°C	Oct 5, 2023
✓ Donor Template WT -> SNV /sequence = TTGGAGGAGCCAGATGGATCACGTAGCCATCTCCTATATACAGGGCCCAGTGCTCATAGCCAAGGCGGAAAATCTCAGTCAGGTCTCCAGGTTTGGGCTC 54% GC / 30,884.0 Da	100-mer	762 .. 861 ←	78°C	Oct 5, 2023
✓ gRNA Protospacer /sequence = CTGATTGAGATTTTCCGCCT 45% GC / 6074.0 Da	20-mer	780 .. 799 →	55°C	Oct 5, 2023
✓ PCR Reverse /sequence = aactcaagtttcccttgcttaactg 40% GC / 7567.0 Da	25-mer	1238 .. 1262 ←	58°C	Oct 5, 2023