

ENSE0...

SOD1-201

Donor Template WT -> SNV

gRNA Protospacer

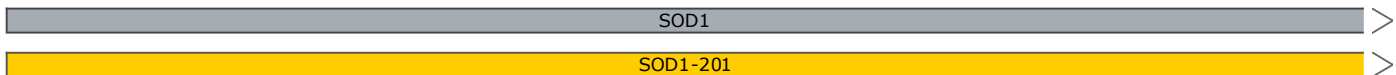
SNV

**CZK2J00160\_SOD1\_D91A\_F09\_AB**  
1392 bp

5'  
3'

TGACTCATCTAAACCCCTGCTCCCAAATGCTGGAATGCTTTTACTTCTGGGCTTAAAGGAATTGACAAATGGGGACACTTAAAA  
ACTGAGTAGATTTGGGGACGAGGGTTTACGACCTTACGAAAATGAAGGACCCGAATTTCTTAACTGTTTACCCCTGTGAATTTT

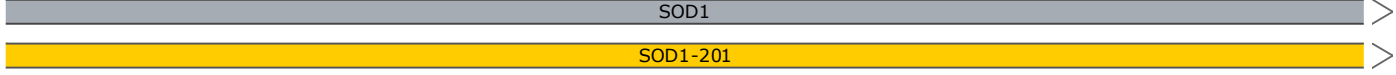
85



PCR Forward  
tacaagtgccaaaggggaactaata

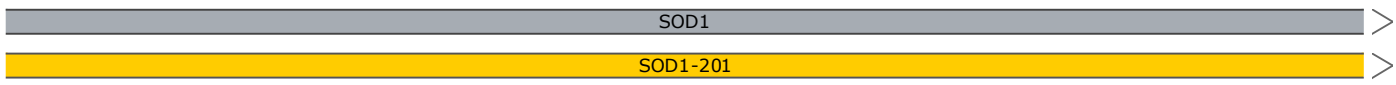
CGATTTGGTTTTGTAGCATTATTGAATATAGAATAATACAAGTGCCAAAGGGGAACATAACAGGAAATGTCATGAACAGTAC  
GCTAAACCAAACATCGTAAATAACTTATATCTTGATTATGTTACGGTTTCCCCTTGATTATGTCCTTACAGTACTTGTTCATG

170



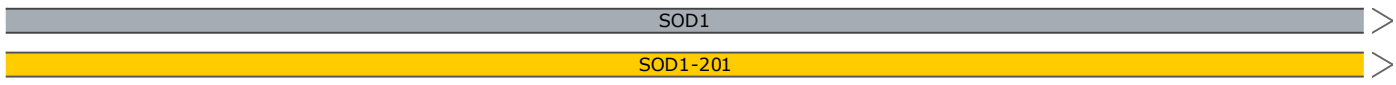
TGTCAACCACTAGCAAAATCAATCATCATTGTGAAACATAGGAAGCTTCTGTAGATAAAAAAAAAAATTGATACTGAAAAGT  
ACAGTTGGTGATCGTTTTAGTTAGTAGTAACACTTTGTATCCTTCGAAGACATCTATTTTTTTTTTAACTATGACTTTTGATCA

255



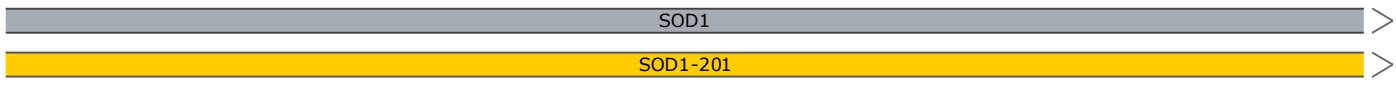
CGAGACTCCATTTATATGTGTATGTTTTCTGAAAGCCTTTCAGAAAAATATTAATTTAAGGACAAGATTTTTATATCAGAGGCC  
GCTCTGAGGTAAATATACACATACAAAAGACTTTCGAAAGTCTTTTTATAATTTAAATTCCTGTTCTAAAAATATAGTCTCCGG

340



TTGGGACATAGCTTTGTTAGCTATGCCAGTAATTAACAGGCATAACTCAGTAACTGAGAGTTTACCCTTTGGTACTTCTGAAATC  
AACCTGTATCGAAACAATCGATACGGTCATTAATTGTCCGTATTGAGTCATTGACTCTCAAATGGGAAACCATGAAGACTTTAG

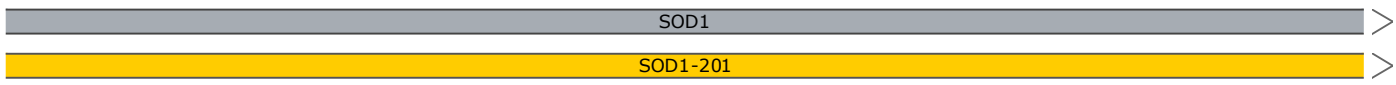
425



Sanger Sequencing Primer  
ccccatctttcttcccagag

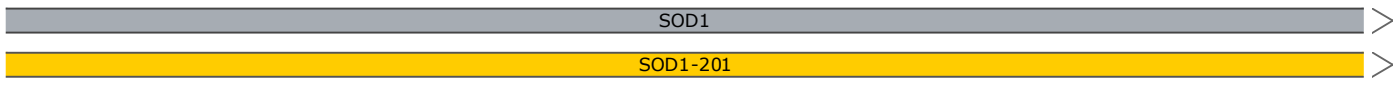
AGGTGCAGCCCCATCTTTCTCCAGAGCATTAGTGTGTAGACGTGAAGCCTTGTGTTGAAGAGCTGATTTAGAATGCCTAGCTA  
TCCACGTCGGGGTAGAAAGAAGGGTCTCGTAATCACACATCTGCACTTCGGAACAACTTCTCGACATAAATCTTACGGATCGAT

510



CTGTTTGCAAATTTGTGTCTACTCAGTCAAGTTTTAATTTAGCTCATGAACTACCTTGATGTTTGTGGCATCAGCCCTAATCC  
GAACAAACGTTTTAAACACAGATGAGTCAAGTTCAAATTAATCGAGTACTTGATGGAACACAAATCACCCTAGTCTGGGATTAGG

595



gRNA Protospacer

GACTGCTGACAAAGATGGTG

ATCTGATGCTTTTTTCATTATTAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGTGTGGCCGATGTGTCTATTG  
TAGACTACGAAAAAGTAATAATCCGTACAACCTCTGAACCCGTTACACTGACGACTGTTTCTACCACACCCGGCTACACAGATAAC

680

SOD1

SOD1-201

H V G D L G N V T A D K D G V A D V S I  
ENSE00003555033  
SOD1-201

Donor Template WT -> SNV

gRNA Protospacer

PAM

SNV

ACCTCTGAACCCGTTACACTGACGACGTTTCTACCACACCCGGCTACACAGATAAC  
Donor Template WT -> SNV

AAGATTCTGTGATCTCACTCTCAGGAGACCATTGCATCATTGGCCGCACACTGGTGGTAAGTTTTCATAAAAGGATATGCATAAA  
TTCTAAGACACTAGAGTGAGAGTCTCTGGTAACGTAGTAACCGGCGTGTGACCACCATTCAAAAGTATTTTCTATACGTATTT

765

SOD1

SOD1-201

E D S V I S L S G D H C I I I G R T L V V S F H K R I C I K  
ENSE00003555033  
SOD1-201 (in frame with SOD1-201)

Donor Template WT -> SNV

TTCTAAGACACTAGAGTGAGAGTCTCTGGTAACGTAGTAACCG

Donor Template WT -> SNV

ACTTCTTCTAACATACAGTCATGTATCTTTTCACTTTGATTGTTAGTCGCGGTTTCTAAAGATCCAGATAAACTGTACTTGCAGT  
TGAAGAAGATTGTATGTCAGTACATAGAAAAGTGAAACTAACAATCAGCGCCAAAGATTTCTAGGTCTATTTGACATGAACGTCA

850

SOD1

SOD1-201

L L L T Y S H V S F H F D C \*  
(in frame with SOD1-201)

TCAAATTAGGAAAAGCAATTTTATTGGACAATTACGGTGAAAATGAATTATTTTATCTAGGTCAGTTAAGAACACTGTTCTGCTA  
AGTTTAATCCTTTTCGTTAAAATAACCTGTTAATGCCACTTTTACTTAATAAAAATAGATCCAGTCAATTCTTGTGACAAGACGAT

935

SOD1

SOD1-201

AGATGCAGTAAAAAGCAGGTTACATTTGACCATATTAGATCTGAGTTTGGAAAACAGAAGTAGTCTTTAGTTTTAAAATGGCCAG  
TCTACGTCATTTTTCGTTCCAATGTAAACTGGTATAATCTAGACTCAAACCTTTTGTCTTCATCAGAAATCAAATTTTACC GGTC

1020

SOD1

SOD1-201

ATTTTCTTGCCAGGATTGGGTTTCTCACTTGTTAAACAGAACATTTTGTAAAGTTTAAAACCTGGGATGGACTTAAGTATTCATG  
TAAAAGAACGGTCCTAACCCTAAAGAGTGAACAATTTGTCTTGTAAAACAATTCAAATTTTGGACCCTACCTGAATTCATAAGTAC

1105

SOD1

SOD1-201

TTCATTCATGTTTCATTCAGGACTGCAGGTTATCATGACTTGTTTAACTTGTGGGAAGCTGTTGTCCCAAGTTATCCTGGGGAAC  
AAGTAAGTACAAGTAAGTCCTGACGTCCAATAGTACTGAACAAATTGAACACCCTTCGACAACAGGGTTCAATAGGACCCCTTGA

1190

SOD1

SOD1-201

GCATCTGGTTCCTTGCAAAACACCAAGTAGACAGGCTCTCTTTTACCTCCCCTTGAGGGCATTAAACATTCAGTAGTCACTTCCATT  
CGTAGACCAAGAACGTTTTGTGGTTCATCTGTCCGAGAGAAAAATGGAGGGGAACCTCCCGTAATTGTAAGTCATCAGTGAAGGTAA

1275

SOD1

SOD1-201

gttcatctgtccgagagaaaaatgga

PCR Reverse

CAGTTAACCCCTTTATTTTTATGGTTTTCTTGAGCCATAGTTGTAAAGCAGAAAAATCATTATAAAGGTTTGTGAACAAAATT  
GTCAATTGGGAAATAAAAAATACAAAAAGAACTCGGTATCAACATTTTCGTCTTTTAGTAAATATTTCCAACAACCTGTTTTAA

1360

SOD1

SOD1-201

CAAATACTGTTGCTTAAAGTATTAAGATTTT  
GTTTTATGACAACGAATTTCTATAATTCTAAAA

3'

1392

5'

SOD1

SOD1-201

Feature	Location	Size	Start	End	Type
✓ <b>SOD1</b>	1 .. 1392	1392 bp	■	→	gene
/note	= gene <a href="#">ENSG00000142168</a> Protein coding				
✓ <b>SOD1-201</b>	1 .. 1392	1392 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000270142</a>				
<b>SOD1-202</b>	1 .. 1392	1392 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000389995</a>				
<b>SOD1-203</b>	1 .. 1392	1392 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000470944</a> protein_coding_CDS_not_defined				
<b>SOD1-204</b>	1 .. 702	702 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000476106</a> protein_coding_CDS_not_defined				
	89 .. 608	520 bp	■	←	gene
/note	= gene <a href="#">ENSG00000273271</a> lncRNA				
	89 .. 608	520 bp	■	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000609934</a> lncRNA				
✓ <b>SOD1-201</b>	619 .. 736	118 bp	■	→	CDS
/codon_start	= 1				
/note	= coding sequence <a href="#">ENSP00000270142</a>				
/translation	= HVGDLGNVTADKDGADVSIEDSVISLSGDHCIIGRTL 39 amino acids = 4.0 kDa				
<b>SOD1-202</b>	619 .. 736	118 bp	■	→	CDS
/codon_start	= 1				
/note	= coding sequence <a href="#">ENSP00000374645</a>				
/translation	= HVGDLGNVTADKDGADVSIEDSVISLSGDHCIIGRTL 39 amino acids = 4.0 kDa				
✓ <b>Donor Template WT -&gt; SNV</b>	625 .. 724	100 bp	■		misc_feature
✓ <b>gRNA Protospacer</b>	643 .. 662	20 bp	■		misc_feature
✓ <b>SNV</b>	651 .. 651	1 bp	■		misc_feature
/note	= WT = A SNV = C				
✓ <b>PAM</b>	663 .. 665	3 bp	■		misc_feature

Primer	Length	Binding Sites	Tm	Date Added
✓ <b>PCR Forward</b>  /sequence = tacaagtgccaaaggggaactaata 40% GC / 7732.1 Da	25-mer	124 .. 148 →	56°C	Nov 7, 2023
✓ <b>Sanger Sequencing Primer</b>  /sequence = ccccatctttcttcccagag 55% GC / 5963.9 Da	20-mer	434 .. 453 →	56°C	Nov 7, 2023
✓ <b>Donor Template WT -&gt; SNV</b>  /sequence = GCCAATGATGCAATGGTCTCCTGAGAGTGAGATCACAGAATCTTCAATAGACACATCGGCCACACCATCTTTGGCAGCAGTCACATTGCCCAAGTCTCCA 49% GC / 30,684.0 Da	100-mer	625 .. 724 ←	76°C	Nov 7, 2023
✓ <b>gRNA Protospacer</b>  /sequence = GACTGCTGACAAAGATGGTG 50% GC / 6206.1 Da	20-mer	643 .. 662 →	57°C	Nov 7, 2023
✓ <b>PCR Reverse</b>  /sequence = aggtaaaagagagcctgtctacttg 44% GC / 7730.1 Da	25-mer	1213 .. 1237 ←	58°C	Nov 7, 2023