



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ676	Date of Submission:	10/28/04
Lexicon Contract Name:	DNA104	Mutation Type:	☒ Standard Knock out
LexVision Name:	SEC466N1		☐ Conditional
Reference accessions:	ENSMUST00000033149, AK019509	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) pKOS-49, 63, 71
☐ Target Vector DNA 63-TV
☐ Targeted ES Cell DNA 1C7
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	14+15	16+17
Restriction Enzyme for Genomic Digest:	HpaI	EcoRI
Predicted Wild-type Band (kb):	7.4 kb	10.2 kb
Predicted Mutant Band (kb):	6.2 kb	8.8 kb
Probe Size:	211 bp	157 bp

PCR Strategies:*For standard knockouts, give wildtype and mutant-specific strategies**For conditionals, give 5' loxP and cre-excision strategies*

Wild type-specific (absent in targeted allele)		Mutation-specific product (absent in wt)	
5' Primer Name:	20	5' Primer Name:	Neo3A
3' Primer Name:	21	3' Primer Name:	7
Predicted Wild-type Band (bp):	272	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	342

5' loxP strategy		Distinguish Cre-excised and wt	
5' Primer Name:		5' Primer Name:	
3' Primer Name:		3' Primer Name:	
Predicted Wild-type Band (bp):		Predicted Wild-type Band (bp):	
Predicted mutant band (bp)		Predicted mutant band (bp)	

Primer sequences:**Southern probes**

14 5' – CGAGTCTCAGAGATGGATGAGC
 15 5' – GGATTCATCTTGGATGATAGCC
 16 5' – AGATGACTGTGTAGGCTTAGC
 17 5' – CACCACTTAGGAGTACTAGTC

PCR Genotyping

7 5' – CCTTAGGCTGTGCCAGCGAGC
 Neo3A 5' – GCAGCGCATCGCCTTCTATC
 20 5' – TGGCCCTGGCTGGAGTCAGAGC
 21 5' – TACCTGGTGGAGGCGTCTCTGC

Genomic Sequence Deleted:

CCCGCCTGCCGCTCCCGGGGACCCGATCCTACCCTGGGTGCGGGGCAGAGCGGGCATGGCCCGTCTGGGGACCGCCTGCCCTGCGCTGGCGCTGGCCC
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TTGCATCGGGCAGCCCGAGGGGGCGCC

Genomic Locus: (the deleted sequence represents nt 4731-5147 in the sequence below)

GGATCTTAAAGCTTTGCAGTCTTCCCCACTTCTTGTCTGATTTCTCTTTCTTTCTTCTGAGATGTAAGCTGCTACCTGC
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Selection Cassette:

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