



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ240	Date of Submission:	10.21.04
Lexicon Contract Name:	DNA038	Mutation Type:	x Standard Knock out
LexVision Name:	SEC459N1		☐ Conditional
Reference accessions:	NM_019568; ENSMUST00000021970	Is this gene X-linked?	No

Required Materials: x pKOS clone DNA(s) __KOS35_____
x Target Vector DNA __TV35-6_____
x Targeted ES Cell DNA __2B4; 3G11_____
x Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	1+2	20+21
Restriction Enzyme for Genomic Digest:	EcoRI	XmnI
Predicted Wild-type Band (kb):	18.9 kb	9.4 kb
Predicted Mutant Band (kb):	8.3 kb	7.7kb
Probe Size:	382bp	278 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:	-5	5' Primer Name:	Neo3a
3' Primer Name:	-6	3' Primer Name:	-8
Predicted Wild-type Band (bp):	230 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	435 bp

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**

SEC459N1-1 5' – CCTACAGTACACCCACAACGAACA
 SEC459N1-2 5' – CTTTCCAGATGAAGCGATCA
 SEC459N1-20 5' – GGGTCAGGGTGTGACTGC
 SEC459N1-21 5' – AGATACAGAGGAACCAGTCGCT

PCR Genotyping

SEC459N1-5 5' – GGGTTTGGGAAGACATATAGGT
 SEC459N1-6 5' – GCACACTTCCAAGCTGTAGG
 SEC459N1-8 5' – ATATTCCCACAAGTCTATAATAGG
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

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Selection Cassette: lacZ/Neo

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Targeted Locus:

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