



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ5793	Date of Submission:	9-18-03
Lexicon Contract Name:	DNA090	Mutation Type:	X Standard Knock out
LexVision Name:	SEC216N1		☐ Conditional
Reference accessions:	ENSMUST00000036564, XM_136951	Is this gene X-linked?	No

Required Materials:

- ☐ pKOS clone DNA(s) 76, 88
- ☐ Target Vector DNA 76.TV
- ☐ Targeted ES Cell DNA 4H10
- ☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' Internal</u>
Name of Probe:	72/73	55/59
Restriction Enzyme for Genomic Digest:	HindIII	NheI
Predicted Wild-type Band (kb):	6.5 kb	10.0 kb
Predicted Mutant Band (kb):	4.5 kb	12.5 kb
Probe Size:	327 bps	1083 bps

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:	70	5' Primer Name:	Neo3A
3' Primer Name:	71	3' Primer Name:	71
Predicted Wild-type Band (bp):	598	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	434 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**

72 5' – ATCATTGATTTGGCAACTT
 73 5' – GCTGGAATTTGGCTCTAAG
 55 5' – AATCCATCTGTGTTCTCTAGC
 59 5' – AGCTGGCGCTCTTTCTTTCC

PCR Genotyping

70 5' – AGCGTGGTTAGCGTGAAGG
 71 5' – AGAAAGCTTTGGGGTAATCG
 Neo3A 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

CCGATTTTCAGTCCAGAAATTTCCACAATATTTTGCCTGGCAAGCAGGAGCTCTCTCCCCAGCAACAACAGCATCTACT
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TCC

Genomic Locus: (the deleted sequence represents nt 10012-12387 in the sequence below)

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[illegible]

[illegible]

[illegible]

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Selection Cassette:

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Targeted Locus:

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[illegible]

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