



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ411	Date of Submission:	10-6-04
Lexicon Contract Name:	DNA318	Mutation Type:	X Standard Knock out
LexVision Name:	SEC559N1		☐ Conditional
Reference accessions:	NM_080434	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __KOS34, KOS42_____
☐ Target Vector DNA __pKOS42TV_____
☐ Targeted ES Cell DNA __3C7_____
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	17+18	19+20
Restriction Enzyme for Genomic Digest:	SpeI	XbaI
Predicted Wild-type Band (kb):	43 kb	10.4 kb
Predicted Mutant Band (kb):	15.7 kb	12.3 kb
Probe Size:	494 bps	593 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:	25	5' Primer Name:	Neo3A
3' Primer Name:	26	3' Primer Name:	30
Predicted Wild-type Band (bp):	314 bps	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	416 bps

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**

17 5' – CTGATCCAAATGGAATAGAGAC
 18 5' – ATAGAGCTGCCAAGGGACTTCT
 19 5' – CTTAAGAGTCCAGTAGTGAGAC
 20 5' – CTCACAAAGGTATCTGCCATC

PCR Genotyping

25 5' – GAAGCTGGCACAGGAGTAAGTA
 26 5' – CAGCCAACCTTCATTGTTACATTC
 Neo3A 5' – GCAGCGCATCGCCTTCTATC
 30 5' – CATGGGTTTCCAGCACGGTC

Genomic Sequence Deleted:

GGGCCCTCGCCCTCCTCGCAGGTGGGTCTTCTGGCCCACTGCAGTGTGGGTTTGGGATGGAGGATGGGCTGAGGGGCCCT
GGCCCTTAAGTGTCTCATCTTCTCTGCAGTGTTCGCAAGCACTCAGGCACGGAAGGGCCCTCTGGGACTACTTCAGCCA
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CTTCAAGACCAGGTCATAGTCATTTGAGTGACCCTGAGGGTCACTCCGTTAACCTCCAGCTCATTG

Genomic Locus: (the deleted sequence represents nt10,890-12,522-in the sequence below)

CAATATTCTCTTCTAGTTCCAGATACACACACAGCACACTTACATACATATTGGAGAAACACCCAGACGTGGGAAATAA
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[illegible]

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Selection Cassette:

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Targeted Locus:

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