



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ1899	Date of Submission:	9-15-03
Lexicon Contract Name:	DNA399	Mutation Type:	X Standard Knock out
LexVision Name:	SEC031N1		☐ Conditional
Reference accessions:	NM_027924	Is this gene X-linked?	No

Required Materials:

- ☐ pKOS clone DNA(s) __pKOS63____
- ☐ Target Vector DNA __pKOS63TV____
- ☐ Targeted ES Cell DNA __1C10____
- ☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	25+26	27+28
Restriction Enzyme for Genomic Digest:	HindIII	BglII
Predicted Wild-type Band (kb):	11.5 kb	9.5 kb
Predicted Mutant Band (kb):	8.5 kb	14.7 kb
Probe Size:	291 bps	220 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:	11	5' Primer Name:	Neo3A
3' Primer Name:	14	3' Primer Name:	24
Predicted Wild-type Band (bp):	611 bps	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	355 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**

25 5' – TGTTATGGTTCTGTGAACTGC
 26 5' – CTACAGGTATGAGTCCTTGC
 27 5' – GGTATGACTTTGTGGAAGTTG
 28 5' – CCTATGCTCTATGAAGCCAG

PCR Genotyping

11 5' – GGAGCTGTAAAGAGATCAGG
 14 5' – TATGACCAGACACTACAACCTG
 24 5' – CCACTCTTGTGGAAGATAATC
 Neo3A 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ACCTCACAGACTTGTACCAGAGAGAGGAGAACATTCAGGTGACAAGCAATGGCCATGTGCAGAGTCCTCGCTTCCCGA
ACAGCTACCCAAGGAACCTGCTTCTGACATGGTGGCTCCGTTCCCAGGAGAAAACACGGATACAACCTGTCTTTGACCA
TCAATTCGGACTAGAGGAAGCAGAAAATGACATTTGTAGGTAAGAGAACATTATTCTTTTTAGTGTTCTAATAAAAGTG
GGAAAATGTGAATTA AAAACATGGATTCAAATATTCTTAAACTCTTTGGAATTACCCAAAACGTTTCTATATTAATCAC
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Genomic Locus: (the deleted sequence represents nt 8134-8503-in the sequence below)

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