



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ311	Date of Submission:	4/7/04
Lexicon Contract Name:	DNA064	Mutation Type:	X Standard Knock out
LexVision Name:	SEC449N1		☐ Conditional
Reference accessions:	NM_172471	Is this gene X-linked?	No

Required Materials:

☐ pKOS clone DNA(s) __pKOS18____

☐ Target Vector DNA __pKOS18 FTV____

☐ Targeted ES Cell DNA __2B4____

☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	11/12	15/16
Restriction Enzyme for Genomic Digest:	SpeI	XbaI
Predicted Wild-type Band (kb):	11.4 kb	6.8 kb
Predicted Mutant Band (kb):	8.3 kb	10.9 kb
Probe Size:	391 bp	344 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:	DNA064-3	5' Primer Name:	Neo3a
3' Primer Name:	DNA064-4	3' Primer Name:	DNA064-4
Predicted Wild-type Band (bp):	365	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	482

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**

DNA064-11 5' – GACAGACACTTAGAACAGCAC
 DNA064-12 5' – CAACACTGCCAAGTCAGCTAG
 DNA064-15 5' – CCACAGATGCCACAGTGAAG
 DNA064-16 5' – GGCTGTACTTAGCTAGGGAG

PCR Genotyping

DNA064-3 5' – CAGGAAGAGGCAAGGAGTTG
 DNA064-4 5' –GACGGATAGGAATCTGGTAG
 Neo3a 5' –GCAGCGCATCGCCTTCTATC

TGCTCCTGCTGCTAGGGCTGTGCTTGGGGTGCCCTCTTCTCAGAGTCCCAGGAAGAGGCAAGGAGTTGGGACGACAC
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Selection Cassette:

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