



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ525	Date of Submission:	1/12/05
Lexicon Contract Name:	DNA444	Mutation Type:	☒ Standard Knock out
LexVision Name:	SEC569N1		☐ Conditional
Reference accessions:	NM_011910	Is this gene X-linked?	No

Required Materials: ☒ pKOS clone DNA(s) __ pKOS SEC569-64 _____
 ☒ Target Vector DNA __ pKOS SEC569-TV64 _____
 ☒ Targeted ES Cell DNA __1D10 _____
 ☒ Genomic Map

Southern Blot Analysis: External/Internal Probe Strategies

	<u>5' External</u>	<u>3' Internal</u>
Name of Probe:	24 + 25	30 + 31
Restriction Enzyme for Genomic Digest:	BglII	SpeI
Predicted Wild-type Band (kb):	4.3 kb	14.7 kb
Predicted Mutant Band (kb):	9.7 kb	11.0 kb
Probe Size:	306 bp	274 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:	DNA444-34	5' Primer Name:	Neo3a
3' Primer Name:	DNA444-14	3' Primer Name:	DNA444-14
Predicted Wild-type Band (bp):	456 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	251 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**

DNA444-24 5' – CCTTACTGCAGGTCTTAGC
 DNA444-25 5' – AAACCTGGATGCCTCTTTGG
 DNA444-30 5' – TCAATGTGGTAAGTTCACGG
 DNA444-31 5' – AAAGCATGAGCAGACGTTGG

PCR Genotyping

DNA444-14 5' – CCAACTCGTACATTTCCAAG
 DNA444-34 5' – AGGCAACCGCAGAGTTAAGC
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

AGACGCTCTTCGGGCTCTGGAGGAGCTGGAGAGGATGGCCCTCTGCAGACCCCTGCGCCAGACCATGGGCACGGAAGCAGGGGAGAGCCCTGGAGAA
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ATAAATCCTCTATGTTTCTCAAGTTATCGCA

Genomic Locus: (The deleted sequence represents nt 11972 – 14755 in the sequence below. KOS68 used to generate the TV represents nt 10816 – 20102 in the sequence below.)

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