



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ2976	Date of Submission:	9-29-04
Lexicon Contract Name:	DNA057	Mutation Type:	☒ Standard Knock out
LexVision Name:	SEC422N1		☐ Conditional
Reference accessions:	NM_024449	Is this gene X-linked?	No

Required Materials:

- ☐ pKOS clone DNA(s) [KOS36](#)
- ☐ Target Vector DNA [pKOS36.TV.1](#)
- ☐ Targeted ES Cell DNA [1F8](#)
- ☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	1+2	16+17
Restriction Enzyme for Genomic Digest:	BclI	StuI
Predicted Wild-type Band (kb):	12.6 kb	6.4 kb
Predicted Mutant Band (kb):	5.3 kb	4.7 kb
Probe Size:	467 bps	316 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:	SEC422-7	5' Primer Name:	Neo3a
3' Primer Name:	SEC422-13	3' Primer Name:	SEC422-13
Predicted Wild-type Band (bp):	223bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	356bp

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**

SEC422-1 5' – TTCCAAGGACAGATCGCATCAT
 SEC422-2 5' – GCCACCTGCCTCGACTTGTA
 SEC422-16 5' – GACCATGAATGTTCTCGTAACG
 SEC422-17 5' – GGGTGTTCTTATGAAAGCTAA

PCR Genotyping

SEC422-7 5' – GGAGGGCGCAAGTGTTATACAT
 SEC422-13 5' – TTGTGGATGAGTCTCACATGG
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

GTGCTACCGAGTGCCCTCCTCCACCTGGCAGCATGCAGCCCTCACTAGCCCCGTGCCTCATCTGCCTACTTGTGCACGCT
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AGAA

Genomic Locus: (the deleted sequence represents 20,460 bps to 24,618 bps in the sequence below)

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