



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ6077	Date of Submission:	10/22/04
Lexicon Contract Name:	DNA229	Mutation Type:	<input checked="" type="checkbox"/> Standard Knock out
LexVision Name:	SEC510N1		<input type="checkbox"/> Conditional
Reference accessions:	NM_177389	Is this gene X-linked?	

Required Materials:

- pKOS clone DNA(s) __pKOS-6, 57_____
- Target Vector DNA __pKOS-57TVneo_____
- Targeted ES Cell DNA __1E7_____
- Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	20+21	22+23
Restriction Enzyme for Genomic Digest:	SpeI	EcoRI
Predicted Wild-type Band (kb):	8.9	8.9
Predicted Mutant Band (kb):	6.1	4.9
Probe Size (bp):	467	464

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:	10	5' Primer Name:	Neo3a
3' Primer Name:	26	3' Primer Name:	11
Predicted Wild-type Band (bp):	424	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	279

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**

20 5' – CCTTTATGGACAGCGACAGGA
 21 5' – CCGAACTGCTACCTTGACGA
 22 5' – GTGTTGTCTGTATCGCTGGTA
 23 5' – GGCAC TTTCAATTTATCGTG

PCR Genotyping

10 5' – CTTCAAACAATTAGAAAAGTGTGGG
 26 5' – GCAGTAACCAGAACCAGTTCAGTC
 11 5' – GAAGTGTCTGGAAATGCAGTGTC
 neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

CGTGGGAAAGCTCTTGAAGACTACGGGGCCCTGATTGTCGTTTTGTAATTTAAAAAAGGTGATGATGTATATGTCTACTACAAACTGGCAGGGGGGA
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Genomic Locus: (the deleted sequence represents nt 8210-11944 in the sequence below)

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