



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ407	Date of Submission:	9-16-03
Lexicon Contract Name:	DNA395	Mutation Type:	☐ Standard Knock out
LexVision Name:	SEC280C1		☒ Conditional
Reference accessions:	ENSMUST00000012849, NM_022984	Is this gene X-linked?	no

Required Materials: ☒ pKOS clone DNA(s) __pKOS-7_____
 ☐ Target Vector DNA __N/A_____
 ☒ Targeted ES Cell DNA __1E1_____
 ☒ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	31+34	39+40
Restriction Enzyme for Genomic Digest:	XmnI/SfiI	SacI
Predicted Wild-type Band (kb):	14.5	10.7
Predicted Mutant Band (kb):	8.5	9.0
Probe Size:	565	214

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:		5' Primer Name:	
3' Primer Name:		3' Primer Name:	
Predicted Wild-type Band (bp):		Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	

5' loxP strategy		Distinguish Cre-excised and wt	
5' Primer Name:	1	5' Primer Name:	1
3' Primer Name:	7	3' Primer Name:	13
Predicted Wild-type Band (bp):	584	Predicted Wild-type Band (bp):	1900
Predicted mutant band (bp)	675	Predicted mutant band (bp)	750

Primer sequences:**Southern probes**

31 5' – GACATGTGGATAGATAACTAG
 34 5' – CTATCACCCCTAGAAGTTGAGCC
 39 5' – GAGTGTAAGTGAACATGTGG
 40 5' – CCCAGTACTGATGTCAGAC

PCR Genotyping

1 5' – AGTTGTGTCCTGCTAAGTCCT
 7 5' – GCTCAGCTCGCTCCATGGAC
 13 5' – CTGCCAAGGTCCAGTCTCCTC

CAGAGTGTCTGATGTGGCGGGCCCCAGAGCTGCTGAATGTCCATCCATGTGTGCCCTCAGGAACTAAAGGACATTGCAGTCTGACTCCCCCAGCATGGGA
AGGGTCTGGTCTAAGGCGGGGGCTCTTGTTGTCTCTTGCAGTACCCACGGGATGAAGAACCTTTCAATTTCCCCTCCTTTTCTCTTCTCTTGTCCCTGA
ACTGCTGGGCTCCAGCATGCCATCTGTGTCCCATCGATGAAGCCATCGACAAGAAGATCAAAACAAGACTTCAACTCCCTGTGTGAGGATCCCCCTTCGC
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