



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ503	Date of Submission:	7/13/05
Lexicon Contract Name:	DNA082	Mutation Type:	☒ Standard Knock out
LexVision Name:	MAS240N1		☐ Conditional
Reference accessions:	NM_183222.2, AY158090	Is this gene X-linked?	No

Required Materials: ☒ pKOS clone DNA(s) __pKOS-77_____
☒ Target Vector DNA __pKOS-77TV Neo_____
☒ Targeted ES Cell DNA __2C1_____
☒ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' Internal</u>
Name of Probe:	54+55	48+49
Restriction Enzyme for Genomic Digest:	BamHI	BamHI
Predicted Wild-type Band (kb):	~12.0	~12.0
Predicted Mutant Band (kb):	6.5	~5.4
Probe Size:	305	598

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:	DNA082-9	5' Primer Name:	Neo3a
3' Primer Name:	DNA082-2	3' Primer Name:	DNA082-2
Predicted Wild-type Band (bp):	266	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	302

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**

DNA082-48 5' – GGATGGCACAGACAGATAACC
 DNA082-49 5' – CCCTAAGCATAAGAACGA
 DNA082-54 5' – ACAAAAAGGACATGTCGAATC
 DNA082-55 5' – AGCAAGATTTCCTAAATATTC

PCR Genotyping

DNA082-2 5' – AAACCTCTAGTGCCATTGCTACCGT
 DNA082-9 5' –CACAGATGTGGCTGACTCTACTGG
 Neo3a 5' –GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

GTGAGTGACTACCATTGCGAGCAAGAGCAAGAGGAAAGCACTACCTGTGAGCAGATGTCTGGTTCATTCTCACCCTGT
GTGGTGTTTCACACAGATGTGGCTGACTCTACTGGTTGTGAGTGAGTAGATGGCTCAATATGGGGATAGAGTGGGTCGG
ACAGCATCTCTCTCCACTACAGGCCTGGTACTCTCTTAAGTTTTAGCTCCTCAGTTTCCCCG

**Genomic Locus: (The deleted sequence represents nt9760-9977-in the sequence below. KOS77 used to generate the TV
represents nt4170-11720- in the sequence below.)**

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[illegible]

[illegible]

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Selection Cassette:

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Targeted Locus:

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