



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ554	Date of Submission:	10/06/2004
Lexicon Contract Name:	DNA087	Mutation Type:	x Standard Knock out
LexVision Name:	MAS239N1		☐ Conditional
Reference accessions:	NM_138682	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __pKOS12-1a3_____
☐ Target Vector DNA __DNA087-FTV_____
☐ Targeted ES Cell DNA __3C1_____
☐ Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	1/2	40/41
Restriction Enzyme for Genomic Digest:	BamHI	BamHI
Predicted Wild-type Band (kb):	20.4	20.4
Predicted Mutant Band (kb):	9	9.4
Probe Size:	482 bp	550 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:	51	5' Primer Name:	Neo3a
3' Primer Name:	52	3' Primer Name:	53
Predicted Wild-type Band (bp):	335	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	407

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**

MAS239N1-1 5' –GTTGGCAAATGCTGACCTAT
MAS239N1-2 5' –CAGCCGAATCCACGCAAGGG
MAS239N1-40 5' –GATCCCGATGGTCAGGCAGTACAG
MAS239N1-41 5' –ATGGCACTAGGAAACGCAGTCATT

PCR Genotyping

MAS239N1-51 5' – CCACAGTCACCACTATCTCTGAAC
MAS239N1-52 5' – CCACCTTACAGCAGTTGACTTGAG
MAS239N1-53 5' – GCAGTTGACTTGAGGCTCCTACCCA
Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ATGAAGCTCTTGTGGCAGGTAACCTGTGCACCACACCTGGAATGCCGTCTGCTTCCCGTCGTCTACCTCACGGCGCAAGTGTGGATTCT
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ACTCCCCCTC

Genomic Locus: (the deleted sequence represents nt 9734-11701 in the sequence below. KOS 12 represents nt 2349-12674)

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Selection Cassette: IRES Beta Gal MC1 Neo

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