



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ1900	Date of Submission:	7-29-04
Lexicon Contract Name:	DNA015	Mutation Type:	X Standard Knock out
LexVision Name:	MAS237N1		☐ Conditional
Reference accessions:	NM_172793	Is this gene X-linked?	no

Required Materials: X pKOS clone DNA(s) __pKOS-MAS237-40_____
X Target Vector DNA __MAS237-TV2.1Puro_____
X Targeted ES Cell DNA __1E7_____
X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External/Internal</u>	<u>3' External/Internal</u>
Name of Probe:	MAS237(15/16)	MAS237(19/20)
Restriction Enzyme for Genomic Digest:	BamHI	BamHI
Predicted Wild-type Band (kb):	14.9	14.9
Predicted Mutant Band (kb):	6.3	8.8
Probe Size:	531 bp	488 bp

PCR Strategies:*For standard knockouts, give wildtype and mutant-specific strategies**For conditionals, give 5' loxP and cre-excision strategies*

A. Wild type-specific (absent in mutant allele)		B. Mutation-specific product (absent in wt)	
5' Primer Name:	MAS237-3	5' Primer Name:	MAS237-10
3' Primer Name:	MAS237-6	3' Primer Name:	GT-IRES
Predicted Wild-type Band (bp):	488	Predicted Wild-type Band (bp):	None
Predicted mutant band (bp)	none	Predicted mutant band (bp)	397

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**

MAS237-15 5' – CATAGCCTGCAGAGTATGGTC
 MAS237-16 5' – CTGTGTTAGTTAGTTATACCAG
 MAS237-19 5' – CAGAAGCAATGGCAGCTGTT
 MAS237-20 5' – CTAACCACTGAAGCAAGAACG

PCR Genotyping

MAS237-3 5' –GAGCTGGAAGTAGCAGGTAC
 MAS237-6 5' –GCTGATGGACCATATTCAGC
 MAS237-10 5' –CTATGAGCTTGATATGGAACTC
 GT-IRES 5' –CCCTAGGAATGCTCGTCAAGA

Genomic Sequence Deleted:

GGCAGATTTCTCAGTATTTCTGGGGTTTCTGAAGCAAATACCTCGGTGCCTCAGCATCTTCTTCACCTACCTT
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Genomic Locus: (the deleted sequence represents nt 6671-9009 in the sequence below)

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Selection Cassette: Bgeo/PGK/Puro

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Targeted Locus: (selection cassette is 6479-12841)

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