



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ3042	Date of Submission:	7/22/05
Lexicon Contract Name:	DNA498	Mutation Type:	X Standard Knock out
LexVision Name:	MEM829N1		☐ Conditional
Reference accessions:	NM_183180	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __pKOS50_____
☐ Target Vector DNA __pKOS50.TV_____
☐ Targeted ES Cell DNA __2B12_____
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External/Internal</u>
Name of Probe:	20+21	18+19
Restriction Enzyme for Genomic Digest:	EcoR I	Nhe I
Predicted Wild-type Band (kb):	13.6 kb	9.1 kb
Predicted Mutant Band (kb):	5.5 kb	14.8 kb
Probe Size:	475 bp	447 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:	DNA498-24	5' Primer Name:	Neo3A
3' Primer Name:	DNA498-13	3' Primer Name:	DNA498-13
Predicted Wild-type Band (bp):	376 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	227 bp

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**

DNA498-18 5' – ATGAGTAAGGACACCAAGGC
 DNA498-19 5' – CTTGTGCTTCATCCCAAAGC
 DNA498-20 5' – ACCTGACTGGTAAGGATTCC
 DNA498-21 5' – GTGAGGAAGTAACAGCTAGC

PCR Genotyping

DNA498-13 5' – AGGATGGGATAACTGTCTGG
 DNA498-24 5' – GCTGCTATTTGTGAGTGACC
 Neo3A 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ATGGAGGGCGACTGTCTGAGCTGCAATGAAGTATCTGATGTTTGTTTTCAATTTCTTCGTTTTTGTAAAGTGCCCTCCTGCCTCTCTCCAGCCCCCTCCCCTGGG
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Genomic Locus: (*The deleted sequence represents nt10003-13054 in the sequence below. KOS50 used to generate the TV represents nt-7418-17196 in the sequence below.*)

[illegible]

[illegible]

TGTAATGTGCACACGCTGTGCACACACGCTGCACAGTGCACACACATGAATATGCACACATGTGCACACACGCTGCACAGTGCACACACATGAATGTGCATACA
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Selection Cassette:

CGCTCTAGAGGCCATAGCGGCCGATCCTCGAGGCCGCGGATCCCGGGCCGCTCTAGCTAGACTAGTCTAGCTAGAGAATTCCGCCCCCTCTCCCTCCC
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Targeted Locus:

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