



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ574	Date of Submission:	1-19-05
Lexicon Contract Name:	DNA274	Mutation Type:	x Standard Knock out
LexVision Name:	MEM691N1		☐ Conditional
Reference accessions:	ENSMUST00000040690, NM_010727	Is this gene X-linked?	no

Required Materials: x pKOS clone DNA(s) __pKOS52_____
x Target Vector DNA __pKOS52-TV neo_____
x Targeted ES Cell DNA __3A8_____
x Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	10 + 11	12 + 13
Restriction Enzyme for Genomic Digest:	EcoRI	EcoRI
Predicted Wild-type Band (kb):	14.8 kb	14.8 kb
Predicted Mutant Band (kb):	5.8 kb	9.0 kb
Probe Size:	346 bp	334 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:	DNA274-3	5' Primer Name:	Neo3a
3' Primer Name:	DNA274-4	3' Primer Name:	DNA274-7
Predicted Wild-type Band (bp):	253	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	298

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**

DNA274-10 5' – TGCCTCAGACTAGAGCACTCT
 DNA274-11 5' – GATGAGGTTGTCATCTAGTGG
 DNA274-12 5' – CCAACTGGGCTCTCGAACCAT
 DNA274-13 5' – CCCATTCATCAAGTCATCCC

PCR Genotyping

DNA274-3 5' – TGCCTTAATCTACAGGCTCC
 DNA274-4 5' – GAGTTGTGGGCACTGAGAG
 DNA274-7 5' – GTCACAAAGCACTAAGCGTG
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

GTCAGGAGGAAGGCCGCAGACTGCTCGGAAAATGAAGGCGCTGCTGCTTCTGGTCTGCCCTGGCTGAGTCCAGCTAACTACATTGACAATGTGGCA
ACCTGCACTTCCTGTACTCGGAAGTGTGAGTCCCCCTCAGTGCCCACAACCTCCGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT

Genomic Locus: *(The deleted sequence represents nt 8255 – 8444 in the sequence below. KOS52 used to generate the TV represents nt 5683 – 14570 in the sequence below.)*

[illegible]

[illegible]

Selection Cassette:

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[illegible]

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[illegible]

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