



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ441	Date of Submission:	10-7-05
Lexicon Contract Name:	DNA159A	Mutation Type:	X Standard Knock out
LexVision Name:	MEM6041		☐ Conditional
Reference accessions:	NM_023557	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS21_____
 X Target Vector DNA __pKOS21TV_____
 X Targeted ES Cell DNA __2B1_____
 X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	11 +12	13 + 14
Restriction Enzyme for Genomic Digest:	NdeI	XbaI
Predicted Wild-type Band (kb):	14.4	8.1
Predicted Mutant Band (kb):	10.0	6.7
Probe Size:	402 bp	305 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:	DNA159-15	5' Primer Name:	Puro3aLR
3' Primer Name:	DNA159-16	3' Primer Name:	DNA159-16
Predicted Wild-type Band (bp):	322 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	152 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**

DNA159-11 5' – GTAAGGCCTGGAAGGTCGATGG

DNA159-12 5' – CAGCAGGAAGAAACCGGAGCA

DNA159-13 5' – GGCCACCCTGGGTTACATAAG

DNA159-14 5' – CCTTGGGCTCAAATTCTAACTT

PCR Genotyping

DNA159-15 5' – TCGCTGAGAATGGCCTACAG

DNA159-16 5' – CCTTCCTTGGAGCCAAACCTC

Puro3aLR 5' –GAACCAGCTGATTACCTGTTATCCCTAC

Genomic Sequence Deleted:

CCAAATATGACCCCTCCTTTTCGAGGCCCCATCAAAAACAGGTGAGCTACGGGCAGTGGCCCCGAGAGATGTGGGGAGG
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TCACTCTACTTCTGGACTTGGGTGCTAGCTACTCAGGTGTGTGTATATGTGAGGAAAAGAAGCAACTGCACATGATCTC
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GTACCCGTGC

Genomic Locus: *(The deleted sequence represents nt10010-11916 -in the sequence below. KOS21 used to generate the TV represents nt 8325-17693 in the sequence below.)*

ATCCATCTTATCTCCCTTGCCCCCAGACCTCAAAACCTTTTTCCACAGCGCCCGAATGCGAGGGGCATGGAGAGCCGCGG
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Selection Cassette:

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