



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ777	Date of Submission:	3-23-05
Lexicon Contract Name:	DNA212A	Mutation Type:	X Standard Knock out
LexVision Name:	MEM724N1		☐ Conditional
Reference accessions:	NM_019500	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS7, pKOS25_____
 X Target Vector DNA __pKOS7TV_____
 X Targeted ES Cell DNA __2F7_____
 X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	19+20	17+18
Restriction Enzyme for Genomic Digest:	EcoRV	BamHI
Predicted Wild-type Band (kb):	12.6 kb	10.7 kb
Predicted Mutant Band (kb):	11.4 kb	6.3 kb
Probe Size:	397 bp	143 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:	DNA212-21	5' Primer Name:	Neo3a
3' Primer Name:	DNA212-10	3' Primer Name:	DNA212-10
Predicted Wild-type Band (bp):	422 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	546 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**

DNA212-19 5' – AACCAAACATTAGGGCGAGGAC

DNA212-20 5' – GCTAATGCTTCCTTCCGTCAAC

DNA212-17 5' – GTTCACTGTCACAGCCTCTAGT

DNA212-18 5' – GTCAGAGCAGATTTGTAGGTGG

PCR Genotyping

DNA212-21 5' – GTGGGTACAGGCTGAATGACTA

DNA212-10 5' – GTGATTCAGTGTCAAGGTCAGG

Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

GGGACCTGGGCACTGCTCAGCGCGGCTAGCAGGGGGCCCTTAGCCATGGCCAGCACAGCGGTCCAGCTCCTAGGCTTCC
TGCTTAGCTTCCCTGGGCATGGTAGGAACGCTCATCACCACCATCCTGCCACACTGGCGGAGGACGGCCCATGTGGGCAC
CAACATCCTGACTGCCGTATCCTACCTGAAGGGACTGTGGATGGAATGTGTGTGGCACAGCACAGGCATCTACCAGTGT
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CCAGTCCAGGGCCGGAGCTACCACCACGGCTACCGCCCCTGCCTACCGCCCACCAGCGGCCTACAAGGACAACCGTGC
CCCCTCGGTGACCTCAGCCGCGCACAGTGGGTACAGGCTGAATGACTACGTGTGAGTTCCTTCCCCG

Genomic Locus: *(The deleted sequence represents nt14222-14998 in the sequence below. KOS7 used to generate the TV represents nt 10356-17428 in the sequence below.)*

AAGGACTGCGGGATGATGGTATGATGAGGATTTTCATGTATGTAATTTCTGACAAGTTGGTGGGAATCCCACTCTATACC
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Selection Cassette:

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