



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ438	Date of Submission:	11/2/04
Lexicon Contract Name:	DNA158A	Mutation Type:	☒ Standard Knock out
LexVision Name:	ENZ416N1		☐ Conditional
Reference accessions:	ENSMUST00000022228, BC025437	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) pKOS-53
 ☐ Target Vector DNA 53-TV
 ☐ Targeted ES Cell DNA 1G7
 ☐ 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	HindIII
Predicted Wild-type Band (kb):	10.4 kb	7.4 kb
Predicted Mutant Band (kb):	13.7 kb	11 kb
Probe Size:	190 bp	158 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:	15	5' Primer Name:	Neo3A
3' Primer Name:	16	3' Primer Name:	4
Predicted Wild-type Band (bp):	160	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	208

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**

DNA158A-11 5' – GCAAAGAGTAGGCAGACAG
 DNA158A-12 5' – TGACCTTCCAGAGCATGTC
 DNA158A-13 5' – GATACTGAAGAGTCCAAC
 DNA158A-14 5' – GTTCATGGCAGCAGTTAC

PCR Genotyping

DNA158A-15 5' – GTGATTAGTACGGCTGTCTTG
 DNA158A-16 5' – CTCATCTTGCTCAGTGCTCAG
 Neo3A 5' –GCAGCGCATCGCCTTCTATC
 DNA158A0-4 5' – GAGACACGTCACCGTAAAG

Genomic Sequence Deleted:

ATGGGCTAGTTTGGGGAGTAAGTCTAGTACGGCTGTCTTGTCCGACTCTGACCGAGTGAAGTTTCCCCCAAAT
ACTCAGGTAAAGAATTGTGTGCTAACAGGTGGGCCTCGCCGAGACCCGCCATTTCGCTTGCGGCCACACTAAGGAGC
GGAGTCTTGAGCACTGAGCAAGATGAGTAACATCTACATCCAGGAGCCGCCACTAATGGGAAGGTGAGAGCCTTACC
TCCTGGACACGGTGACTGGGGGCGGGCAGGGAGGGGCAGCTATCGGGGATTTT

Genomic Locus: (the deleted sequence represents nt 7,168-7455 in the sequence below)

[illegible]

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Targeted Locus:

[illegible]

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[illegible]