



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ478	Date of Submission:	7/22/05
Lexicon Contract Name:	DNA079	Mutation Type:	X Standard Knock out
LexVision Name:	MEM652N1		☐ Conditional
Reference accessions:	ENSMUST00000027545	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __pKOS11,pKOS30, pKOS54_____
☐ Target Vector DNA __pKOS11 TV_____
☐ Targeted ES Cell DNA __1E11_____
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' Internal</u>
Name of Probe:	9+10	15+16
Restriction Enzyme for Genomic Digest:	EcoR I	BamH I
Predicted Wild-type Band (kb):	13.2 kb	8.5 kb
Predicted Mutant Band (kb):	10.5 kb	5.2 kb
Probe Size:	507 bp	483 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:	DNA079-25	5' Primer Name:	Neo3a
3' Primer Name:	DNA079-8	3' Primer Name:	DNA079-8
Predicted Wild-type Band (bp):	118 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	224 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**

DNA079-9 5' – GCTAAGCCATGATAAGTAACC
 DNA079-10 5' – ACTCCTATTAGTACTGGTAGC
 DNA079-15 5' – AGTCATGTTTTTAAAATATGCC
 DNA079-16 5' – CCAATTCCACTTGACAGTCC

PCR Genotyping

DNA079-8 5' – GCACTACCAAACATATATTCC
 DNA079-25 5' – AACCATATGAGGCCATTGTACC
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ACTTAGACAATGGAAACAACCTCTTTCCAGTACAAGCTACTGGGGATTGGCGCTGGAAGCTTTAGCATTAAATGAAAGAACAGGTGAAATATGTGCCATA
CAGAAGCTTGATAGAGAGGAAAAATCCCTCTACATTCTGAGAGCCCAGGTAATAGACACCACTATTGGGAAGGCTGTGGAACTGAATCCGAGTTTGT
CATCAGAGTTTTGGATATCAATGACAATGAACCCAGATTCTAGATGAACCATATGAGGCCATTGTACCTGAGATGTCTCCAGAAGGTACTAAATGAT
AATTTA

Genomic Locus: *(The deleted sequence represents nt13598-13897 in the sequence below. KOS11 used to generate the TV represents nt-8198-18376 in the sequence below.)*

[illegible]

[illegible]

[illegible]

Selection Cassette:

Targeted Locus:

GATCTGCGCTCTAGAGGCCATAGCGGCCATTTAAATGGCGCGCCGGATCCCGGGCCGCTCTAGCTAGACTAGTCTAGCTAGAGGAATTCGCCCCCTCTC
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