



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ803	Date of Submission:	5.18.04.
Lexicon Contract Name:	DNA244	Mutation Type:	☒ Standard Knock out
LexVision Name:	MEM699N1		☐ Conditional
Reference accessions:	ENSMUST00000020025, AK035858	Is this gene X-linked?	No

Required Materials: ☒ pKOS clone DNA(s) 42
☒ Target Vector DNA 42-TV
☒ Targeted ES Cell DNA 1E12
☒ Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	17+18	13+14
Restriction Enzyme for Genomic Digest:	SpeI	XbaI
Predicted Wild-type Band (kb):	18.3	5.0
Predicted Mutant Band (kb):	11.4	6.8
Probe Size:	251 bp	195 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:	5	5' Primer Name:	Neo3A
3' Primer Name:	6	3' Primer Name:	6
Predicted Wild-type Band (bp):	179	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	245

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**

DNA244-13 5' – GCAGTTCATAGAATCCTGAG
DNA244-14 5' – CATGCTCCATGTACCAAGG
DNA244-17 5' – ACCTGATGGTAGACCAGATAG
DNA244-18 5' – TCATGCATGATGCATCGCAGT

PCR Genotyping

DNA244-5 5' – GAGGTATGAACCATTGCGA
DNA244-6 5' – CCTTGCCAGCATAGTGAGA
Neo3A 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

GTAATTAGGCTACTGCGAGGATCAGCTGTAGCGGTGGTTCTAGCACCCACTGTCTTACTGACAATGCTTTCT
TCTGCTGAACGAGGATGCCCTAAGGGTTGTAGGTGTGAAGGCAAAATGGTATACTGTGAGTCTCAGAACT
GCAGGAGATACCTCGAGTATATCTGCCGGTTGCTTGGGTTTATCCCTTCGCTACAACAGCCTCCAAAACT
TAAGTATAATCAATTTAAAGGGCTCAATCAGCTCACCTGGCTCTACCTTGACCACAACCACATCAGCAATAT
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**Genomic Locus: (the deleted sequence represents nt 7,012-8,635 in the sequence below) KOS-42 used to generate the TV
represents nt 752 – 9,332 in the sequence below.)**

CTATAGTCCTTAGTTTTTAAGGACTGAATTTGGGAGAGCTGGCTCAGCAGTTTAGAGTGTTTGCTGCTCTTCC
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Selection Cassette:

GGCGCGCCGGATCCCGGGCCGCTCTAGCTAGACTAGTCTAGCTAGAGAATTCCGCCCCCCCCCCCCCCCCCCC
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