



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ664	Date of Submission:	3.10.04.
Lexicon Contract Name:	DNA354	Mutation Type:	☒ Standard Knock out
LexVision Name:	MSC341N1		☐ Conditional
Reference accessions:	ENSMUST00000028736	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) pKOS-59
☐ Target Vector DNA -59-TV
☐ Targeted ES Cell DNA 1B10
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	12+13	14+15
Restriction Enzyme for Genomic Digest:	NheI	ApaLI
Predicted Wild-type Band (kb):	12.6 kb	14.5 kb
Predicted Mutant Band (kb):	15.8 kb	11.3 kb
Probe Size:	187 bp	165 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:	6	5' Primer Name:	Neo3A
3' Primer Name:	4	3' Primer Name:	5
Predicted Wild-type Band (bp):	272	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	218

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**

DNA354-12 5' – CAAAGTTGGAATGTGCCAGGTG
DNA354-13 5' – GTTCCAGCTCAGGGCTACACTG
DNA354-14 5' – GGGTGAAGCTCCAGATGTATTG
DNA354-15 5' – GCTGGCACTCATGATGAAATCC

PCR Genotyping

DNA354-4 5' – GGTACAGGTAAGGTCTAGGG
DNA354-5 5' – AAGGCATGCACATCCCACACG
DNA354-6 5' – CCCTAGGTCAGTAAGCAAGTC
Neo3A 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ATGGCGGCCGTTTTAGAGTCGCTGCTGCGCGAAGAGGTGCCGGTTCGCAGCCGCCGTGCGGTGGATCGCGCG
CAGCACCCCGAGTTCGGAGGTAACAGTGCAGACACGCCCTCAAGCCTGCCTGGAATGTGCTTCCCGCGGGG
GATGATGCTTCAGTCCCTTCTCCAGCCTGCCCTGCCTGACGGCCCGCGCCAAGGGCGCTCGCTCCTCTGCG
CGCCGCTGCCGGGCCGCCACCCTGCGGCCTCAGCCGCTGACGGCCCGCGCTGTCAGCTGACGCTCTCGCCC
CGCGACCTCTGCTTCTTCTCAGGATAGCTCCGAGGTGGCCGCTCTGAGCGCACTTCGGCCTCTGCGGAAGG
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GTTCTTAACATAACGGTTTGTTGTTGACCTAGATTCCCTGGACACTCCCCTGTTTCGTAGCATCCATGATTGCG
TCTTCTTTGCAGTGCAAGTTTTGGAGCATCAGTTTCAGTGAGTTTTCTAGCTGT

Genomic Locus: (The deleted sequence represents nt 4,686 – 6,782 in the sequence below. KOS59 used to generate the TV represents nt 2551-9522 in the contig below.)

CAAAACACCAAAAAACAAAAAAATCTAGGCTCTTCTCTCCAGCTCTGCACACAGGCTGGCCTTGCAAACA
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Selection Cassette:

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