



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ6268	Date of Submission:	11/2/05
Lexicon Contract Name:	DNA391	Mutation Type:	X Standard Knock out
LexVision Name:	MAS266N1		☐ Conditional
Reference accessions:	AV140744, ENSMUST00000047983	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __pKOS-36_____
☐ Target Vector DNA __pKOS36.TVneo_____
☐ Targeted ES Cell DNA __2F4_____
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	31/32	24/25
Restriction Enzyme for Genomic Digest:	EcoRI	Hind III
Predicted Wild-type Band (kb):	6.0 kb	10.2 kb
Predicted Mutant Band (kb):	5.0 kb	8.3 kb
Probe Size:	153 bp	491 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:	3	5' Primer Name:	Neo3a
3' Primer Name:	4	3' Primer Name:	19
Predicted Wild-type Band (bp):	313 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	208 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**

DNA391- 31 5' – AGCCCGCACGTGAGTCC
DNA391-32 5' – TGGCAGGCCTTGACATACTCC
DNA391-24 5' – CCGAAGGCAGGGTCTGGATTGA
DNA391-25 5' – CCGGGTGAAGTTGTGGTC

PCR Genotyping

DNA391-3 5' – AGAAGCCTCTCCTCCAGTTCCC
DNA391-4 5' – GCTCTGAAAAACCACAGTTGCC
DNA391-19 5' – AAGGCCAATATAGAGGATACAGC
Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

CTGTGAATGAGGAGACACCCCAGATGGATCCAGTTTTCTGCAGAGAATCACAGACATTGTGGGGTTCTGGAGTTTTCTC
TGGCCCAGGGGCCCAAGACAGGGTGGAGCAGCCACACCTGCCTGAAGTTCTGAGGAAGAGGGCGGAAACAGACAGC
TCCCGCCCTCGCCCTCACCTCACTTTCTCTCCCCACAATTGTGATAGGCTCCACTGGGGGCATTGTGTGCCACAGGGGC
TCACTTCCCCAAACAGGCAACTGTGGTTTTTCAGAGCCTGCTGTCCAACCCTGGGAGGTCAGGTGGCATGCCTGGGATC
AGTGTGGGTCTGCCCCCTCGATCCCCGGGCTGACTGTGACATTGCATCTGGATGGAGCCATGGCCTCTTACGTTCTGTCT
GTTGCTGCTGCTGCTGTGGCTACAGGGCTGTGTCTCAGGTGAGAGGCAGGGGTGGGGGTGGGGTTGGTAGAAGAG
AAAGACTACTTCCCCCTGTCTACCCACACTGCCTCTTCTGTTCACCATCTTAATGTTTTGTGGGTGGGGAAGGAGG
GTGGGCTGACCGGTCTTTACCAGAGACCAGTGAGAATGTCCCCTGCTAATATCTGGCCCCAGGCAGAGC

Genomic Locus: (the deleted sequence represents nt 8577-9198 in the sequence below. . KOS36 used to generate the TV represents nt 3814-10712 in the sequence below.)

GACATCCCCTTGAGATGGATCTTAGGATTTTTGGTTTGGTGGGCATGGTAGTGTGCCCCTATGGCTTCTTCAGCCAGGAT
CCACATCAGTGACACTGGCAAGGCAGGCTCAGGGGGCTCTAAGGTAGACATAGAGCATTTCATGGCTATCAGTGGGTCC
TGTGGCAGGGCAGAGCTACTCTGGCGGGCTACACAGGTAGGGTGACGTTGATACAGAAGATATGGGTACTTTTCAAA
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CAAGAATGGGTTCAATGCCAGGCTGGGTGGCTCACACCTTTAATTACAGCACTTGGGAGACAGATCTCTGTAAGCTCCA
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Selection Cassette:

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Targeted Locus:

GATCAAGGCAACTCTTATAAGGACAACATTTAATTACAGCTGGCTTACAGGTTTCAGAGGTTTCAGTCCATTAT
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