



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ272	Date of Submission:	11-9-04
Lexicon Contract Name:	DNA241	Mutation Type:	X Standard Knock out
LexVision Name:	SGT263N1		☐ Conditional
Reference accessions:	ENSMUST00000009696	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS 82 _____
X Target Vector DNA __FTV 82 Neo_____
X Targeted ES Cell DNA __2A1_____
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External/</u>
Name of Probe:	22/23	27/28
Restriction Enzyme for Genomic Digest:	Sph I	SphI
Predicted Wild-type Band (kb):	14 kb	14 kb
Predicted Mutant Band (kb):	11.7 kb	5.3 kb
Probe Size:	357 bp	330 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:	DNA241-13	5' Primer Name:	Neo 3a
3' Primer Name:	DNA241-14	3' Primer Name:	DNA241-25
Predicted Wild-type Band (bp):	406 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	263 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**

DNA241-22 5' – CACTGTGGACAGGAATGGTGGGC
 DNA241-23 5' – CAGAGCGCAACACCTGGGAGACC
 DNA241-27 5' – CCCCTAGTGGACAACAAGC
 DNA241-28 5' – CCCATAGGTGTGTGCCATGTATAA

PCR Genotyping

DNA241-13 5' – CTTACTTTGCCTTGTAGGAACCC
 DNA241-14 5' – GGCACGTGAGCACATAGTCCC
 DNA241-25 5' – AGAACATTTCGTGGGGACACTGCT
 Neo 3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

GAAGTACATTCTTGACTCCTCGCCAGAGAAAAGTGCACAAGGAGCTGGAAGAGGAACTGAAGCTCAGCAGCACGGACCTCCGTAGCCATGCCTGGTACC
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CCCAGCTCTCTGCCTATAGCACTGGTAAGCTAGC

Genomic Locus: (the deleted sequence represents nt 9392-11786 in the sequence below. KOS82 used to generate the FTV represents nt 4027-13619 in the contig below.)

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Selection Cassette: LacZ/Neo

Targeted Locus:

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