



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ16233	Date of Submission:	11.12.04
Lexicon Contract Name:	DNA231	Mutation Type:	X Standard Knock out
LexVision Name:	SEC512N1		☐ Conditional
Reference accessions:	NM_173395	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS 92_____
 X Target Vector DNA __pTV 92neo_____
 X Targeted ES Cell DNA __1D1_____
 X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	15+16	13+14
Restriction Enzyme for Genomic Digest:	HindIII	BamHI
Predicted Wild-type Band (kb):	4.8	6.1
Predicted Mutant Band (kb):	3.7	3.4
Probe Size:	318	288

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:	DNA231-23	5' Primer Name:	Neo3a
3' Primer Name:	DNA231-24	3' Primer Name:	DNA231-8
Predicted Wild-type Band (bp):	216	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	390

Primer sequences:**Southern probes**

DNA231-13 5' – CTGGACCTTCCAAGTCCTG
DNA231-14 5' – GGTACCAGCCATACTGAGAATC
DNA231-15 5' – GGTCCAGACATAGTCACCAG
DNA231-16 5' – GGCTTCTATGCTTCTTGCTG

PCR Genotyping

DNA231-8 5' – GACCGTCACTGAGGTTCCAC
DNA231-23 5' – GTCAGCCTTACCTGCCCAG
DNA231-24 5' – GACGTGAATCTCAGTCTGGC
Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

GCGCATGCACACAGTGTGGATCCCCGGGATGCTTGGATGCTGTTTCGTCGAAGCAGAGTGACAAGGGGATCAACAGTAAGAGGAGGAGCAAAGGCCAGGA
GGCTGAAGGTGAGCAGCTTGGGGCCCAACACCTCCCCGAGCCCTAGTACCCCTTCCAACAGCAGAAAGCCATGGAAAGAAAACAAGGATCAAGTATGAA
GCTGGCTCCTTCCCTTAGGTCCGTGACCCAGACCAGTATAAACTCCCAAGTCTGAGTGAGACTTGTGTGTGTCTCAGGCCAGAGCTGAGATTACGTCC
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TGA CTGACTCCTGCATTGAGTTCCTCCAAGTAACTCTGGATCCAGGCTGGGCTTCAGTGTGTGTGTGTGTCTCTATTGAGGGTCAGCCTTACCTGCCCA
GGATCTGACCCATTCACTGGGCTGGGTGTGTGTATGTGTGTGTGGTCAGCCCTGCCCCCTTAGGCTACCTGGCCTTGTCTAGGCTTCTCTATGCAGGAG
CTTGCCCTCCTTCCCTTAGGTCCGTGACCCAGACCAGTATAAACTCCCAAGTCTGAGTGAGACTTGTGTGTGTGTCTCAGGCCAGAGCTGAGATTACGTCC
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CATAGCACCCCTTGGACACATTCAAGTGCCGATGCTGGCTTGAGAAGAGGCG

Genomic Locus: (*The deleted sequence represents nt 4658-7861 in the sequence below. KOS92 used to generate the TV represents nt 1825-9595 in the contig below.*)

AGAGAGGGAAGACAAAACACTGGCAGAGTATTCTAAAGCCACCGTGGGGCCACAAAGTGAGCAGGAAGAGGGACAGCCACCAGCATAACACACAGA
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Selection Cassette: LacZ/Neo

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Targeted Locus:

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