



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ983	Date of Submission:	4-6-05
Lexicon Contract Name:	DNA451	Mutation Type:	<input checked="" type="checkbox"/> Standard Knock out
LexVision Name:	PRT359N1		<input type="checkbox"/> Conditional
Reference accessions:	NM_019447	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __ pKOS86, _____
 X Target Vector DNA __pKOS86.TV_____

X Targeted ES Cell DNA __1H5_____

X Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	11+12	13+14
Restriction Enzyme for Genomic Digest:	BglII	SpeI
Predicted Wild-type Band (kb):	6.9 kb	11.2 kb
Predicted Mutant Band (kb):	17.1 kb	14.6 kb
Probe Size:	448 bp	393 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:	DNA451-16	5' Primer Name:	Neo3A
3' Primer Name:	DNA451-10	3' Primer Name:	DNA451-10
Predicted Wild-type Band (bp):	240 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	281 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**

DNA451-11 5' – GGACCTGCTGGCATTCTACATA
DNA451-12 5' – GCAGTGCCAAGTCCTCTAACAG
DNA451-13 5' – TCTCACCGCCTCATCCTACTC
DNA451-14 5' – AGTCACTCTGGGTTACGGCATT

PCR Genotyping

DNA451-16 5' – GAACCCAGACAAGGATGAGAG
DNA451-10 5' – CAAATGGCTGGATATTCCCAGC
Neo3A 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

TGGGGCGACAGGCCTGGATCTCTAGCCTCTGTCCCTTACCCAGGCCATGTCCCTTCCCTGCTGCTCCTGCTGCTGCTGGTG
GTGCCTCGGGGGGCCAGCCCCAGGCTGGCAGGGTGAGCACTGCCCTCTCCCTTGATGTGGCCAAGGGTTCTCTATG
CACACTCGGTTCTGGGAAGAGAGAGGTCAGAAAGAGGGCCCCAGAGTGAGCTAGGGACCCAGTGTGGTGGCATAGT
GGAGTGGAAAGTTGTCATTTTGCAGTGAATATGGGGTGTGGGCTAGGCTGGTCTGTAGTGTCTGGGCTGAACTTGT
AGGATCCTCTTGTGGCACTGTGTGGCCCAGGCCCCGTGAGTGAGTGGGGGGGGGGGTCCTGGGGCTTCTGCTGCATT
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GAATCTCAAGGACCAGGGTGAACCTGGGGCCCTGTGACTCTTAAGTTAGCACATTGGATCACTCAGATTCAGAAGGAAA
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CACTGTCGTGGGAGTATTGCCGCCTGACAGCCTGTGGTGCGGGCACCCTGATAGGTTGGGGGCAGAGGGGTGGT

Genomic Locus: (The deleted sequence represents nt 15043-18337 in the sequence below. KOS86 used to generate the TV represents nt 12647-22288 in the sequence below.)

GGCACCACATATGGGCTGCTTAACCCTCCATCATAGTGGAGAAAGAGGGCAAGAGTCTCTACCCAGAGGATTCTAGGCA
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GGCAAATATGGCCTGGACCTGGGTAGCCTGCTGGTGTGAGACTGGTAAGTGTCAATTTGGAGTCTGAGCACCACCAG
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Selection Cassette:

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Targeted Locus:

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