



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ6973	Date of Submission:	10.18.04
Lexicon Contract Name:	DNA491	Mutation Type:	X Standard Knock out
LexVision Name:	SEC453N1		☐ Conditional
Reference accessions:	NM_011719	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS35_____
X Target Vector DNA DNA491.35.TV1.1_____
X Targeted ES Cell DNA __1H7_____
X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	17/18	19/20
Restriction Enzyme for Genomic Digest:	EcoR1	Xba1
Predicted Wild-type Band (kb):	20.0 kb	8.6 kb
Predicted Mutant Band (kb):	13.3 kb	11.4 kb
Probe Size:	506 bp	199 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:	DNA453.1	5' Primer Name:	Neo3A
3' Primer Name:	DNA453.3	3' Primer Name:	DNA453.12
Predicted Wild-type Band (bp):	501 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	334 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**

DNA453.17 5' – GTCCAATCACCAGTACTACAG
 DNA453.18 5' – CGAGAGTGTGCTCTTATTATC
 DNA453.19 5' – GCAGTCACCAAGATACTCCA
 DNA453.20 5' – CAAGGCTGTGGAAACCTAC

PCR Genotyping

DNA453.1 5' – GTGAGGTCCTGACACCCCTTC
 DNA453.3 5' –GACCACTAAGTAGGTGGCTG
 DNA453.12 5' –CCTTCTCAGTCTGTTCTCCG
 Neo3A 5' –GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

TGACCGGTCTGTAGGTCCTGACACCCTTCCCAGGCCTGGGTACGGCAGCAGCCCCGGCACAGGCTGGTGCTCACCTGAAGCAGTGTGACCTACTGAAG
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CGCGAACACGCGCAAGCGCGCAC

Genomic Locus: (the deleted sequence represents nt 13323 – 16492 in the sequence below. KOS35 used to generate the TV below represents nt 11043 – 22145)

AATTCTCTCAGACCCTCTTGGCCATAGTGAGAGAGGGCCACACCTTCTCAACAGTGAGACGGGCAGAATTCATGACCTTCTAGTCCATCAGGTGGGT
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[illegible]

[illegible]

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Selection Cassette: IRES Beta Gal MC1 Neo

Targeted Locus:

AATTCTCTCAGACCTCTTGGCCATAGTGAGAGAGGCCACACCTTCCTCAACAGTGAGACGGGCAGAATTCCATGCACCTTCTAGTCCATCAGGTGGGT
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