



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ340	Date of Submission:	10-10-05
Lexicon Contract Name:	DNA302	Mutation Type:	X Standard Knock out
LexVision Name:	MSC339N1		☐ Conditional
Reference accessions:	BC034093	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS12_____
 X Target Vector DNA __pKOS12TV_____
 X Targeted ES Cell DNA __2H1_____
 X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	23+24	21+22
Restriction Enzyme for Genomic Digest:	EcoRI	EcoRI
Predicted Wild-type Band (kb):	13.2	13.2
Predicted Mutant Band (kb):	3.8	9.1
Probe Size:	363 bp	318 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:	DNA302-5	5' Primer Name:	Neo3a
3' Primer Name:	DNA302-6	3' Primer Name:	DNA302-6
Predicted Wild-type Band (bp):	283	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	211

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**

DNA302-23 5' –CCAGTGATGTCTAACGCCACAG
 DNA302-24 5' – AGGAGATAAAGCAATAGGGCAATG
 DNA302-21 5' – ACCCAGGCGGACCTTATACTTG
 DNA302-22 5' – AGACAGAGTTGGGGCAGAGCTTAG

PCR Genotyping

DNA302-5 5' – GGGAGAGGACACTGGGCAAGA
 DNA302-6 5' –CTGCCTTTCCCAGCCACCTGACAT
 Neo3a 5' –GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ATGGGGCTGGAGGCCAGAGGCTGCCTGGGGCTGAGGAGGCCCCCGTGAGGGTGGCCCTTCGAGTTCGCCCATTGCTG
CCCAAGGAGCTGCTGCATGGTCATCAGAGTTGCCTGCGTGTGGAGCCTGAGCGGGGTGCAATCACCTGGGGCGGGAC
CGACACTTTGGGTTCCATGTGGTCTCTGGGAGAGGACACTGGGCAAGAGGCTGTGTACCAGGCTTTCGTGCAGCCCCCTCC
TCGAGGCTTTCTTTGAGGGCTTCAATGCCACCGTCTTTGCCTATGGTCAGACAGGCTCTGGGAAGACATATACCATGGG
GGAGGCCAGTGTGGGTGAGTGATGCTTACTATGTTTCTGAATTTTCTGTACCCCCACCCCCACCCCCACCCCAAGGCAA
GGATGCTGAGGAGGGAGTGGGCATCTC

Genomic Locus: *(The deleted sequence represents nt19740-20159-in the sequence below. KOS12 used to generate the TV represents nt 16756-26025 in the sequence below.)*

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Selection Cassette:

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