



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ2438	Date of Submission:	10-4-05
Lexicon Contract Name:	DNA147A	Mutation Type:	X Standard Knock out
LexVision Name:	MAS271N1		☐ Conditional
Reference accessions:	BY721012	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS3, pKOS19_____
 X Target Vector DNA __pKOS3TV_____
 X Targeted ES Cell DNA __1G4_____
 X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	14+15	16+17
Restriction Enzyme for Genomic Digest:	EcoRI	Bgl II
Predicted Wild-type Band (kb):	11.5	13.4
Predicted Mutant Band (kb):	5.5	18.3
Probe Size:	376 bp	236 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:	DNA147-18	5' Primer Name:	Neo3a
3' Primer Name:	DNA147-13	3' Primer Name:	DNA147-13
Predicted Wild-type Band (bp):	320	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	443

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**

DNA147-14 5' – GGTCTTGTGTGGCAAAGCTAGTCT
 DNA147-15 5' – CCCCACCTTCCTTTTCTACAGTCA
 DNA147-16 5' – GGTCTGAAGGAAGCACGTCTTACA
 DNA147-17 5' – GAGTAATGGCCTAAACCTCA

PCR Genotyping

DNA147-18 5' – GGCGAGCCGCTGGTTCTACAG
 DNA147-13 5' – AGAACGCCAACATTGCACGGTTAC
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Contact Information:

Laura L. Kirkpatrick, Ph.D.
 Senior Scientific Group Leader, Molecular Genetics
 Lexicon Genetics, Inc.
 8800 Technology Forest Place
 The Woodlands, TX 77381-1160
 Phone: 281-863-3016
 Email: laurak@lexgen.com

Additional Contact:

Kathleen Holt, Ph.D.
 Senior Director Molecular Genetics & Alliance Management
 Lexicon Genetics, Inc.
 8800 Technology Forest Place
 The Woodlands, TX 77381-1160
 Phone: 281-863-3013
 Email: kholt@lexgen.com

Genomic Sequence Deleted:

GCCTCCGGGGAGTGGCGGGCGCCAGGAGGGAGCCAGCGGCATGGGCCGGGGTCCCCGGGGACGCGCCGCTCTCCAG
GATGCGGGTTGCAGCGGCTGCTGCGGCTCGTGCTGCTGCTCAGCCTAGCCCGCGGCGTCAGCGGAGAGCCTGGCACGG
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GCCGCGTGAGGATGTGGGAGGGCGAGCCGCTGGTTCTACAGCTTCCAGTCTCCCTGGCTTTTGCA

Genomic Locus: *(The deleted sequence represents nt7762-8214-in the sequence below. KOS3 used to generate the TV represents nt 5520-15118 in the sequence below.)*

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[illegible]

[illegible]

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Selection Cassette:

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