



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ3127	Date of Submission:	7-14-05
Lexicon Contract Name:	DNA364	Mutation Type:	X Standard Knock out
LexVision Name:	MEM749N1		☐ Conditional
Reference accessions:	AK030128	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS 37, 43, 61_____
 X Target Vector DNA __pTV 61Bgeo_____
 X Targeted ES Cell DNA __1C12_____
 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:	SpeI	HindIII
Predicted Wild-type Band (kb):	15.5	5
Predicted Mutant Band (kb):	20.1	9.1
Probe Size:	289 bps	249 bps

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:	DNA364-11	5' Primer Name:	DNA364-11
3' Primer Name:	DNA364-17	3' Primer Name:	GT-IRES
Predicted Wild-type Band (bp):	391	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	455

Primer sequences:**Southern probes**

DNA364-13 5' – CGTCCATGGCACTTGGTAG
DNA364-14 5' – TGCTGCTCCTCCTCAGTCT
DNA364-15 5' – CAGTGCCAGGAATGCAGAA
DNA364-16 5' – CCGTTGTTGCAAGTGAGAC

PCR Genotyping

DNA364-11 5' – GAAGGCTACACCTCTTGCA
DNA364-17 5' – GCTGCAGCAACGACCACTTC
GT-IRES 5' – CCCTAGGAATGCTCGTCAAGA

Genomic Sequence Deleted:

CCTGATCACGGGCTATGAGAAGATGGTGGGGCCGACAAGGAGTAAGCTCAGGGAAGGGAGCTCCGACAGGCCACAATCCTCCTGCACGGGGCAGGGCG
AGGAGGAGGTGGAGCGCAGCGACCATGGAGCCCCAGCAGGAGCGAAGCGCGCCAGGAGAGAACGAAGTGGTCTGCTGCAGCATTTCTCCTAG
GCGGCAGGAACTGCCCTCGGGTGCTCGCAACTACGCGCGCGGAGGATCCTGCAAGCTGTAACGACAAAAATTTACTTTTCAGTCTGGAAGAGGTGCGCAA
GCTCCTTCTTTAACCCTTCCAATTCCTCTTCACTCTCCTGGACCATTTCGCGAAAAGGTGCAGGCACTGCAGATGCATCGGTTCTCCACAGGACC
CTCTTGGCCTAGGTGAGCCGAGTCTGCTCAGTGTCCAGCCGA

Genomic Locus: (The deleted sequence represents nt 15577-16011 in the sequence below. KOS61 used to generate the TV represents nt 8153-16977 in the sequence below.)

ACTGGGGAGGGAAACCCCGTTGCAAAGATTCCATAGATACCATGGTCTCATTAACTTTTCTTAAATCTGTAAACAGTCTCCATTTACCCGATTCTTCT
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Selection Cassette: IRES-bGeo-PGK Puro

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Targeted Locus:

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