



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ3034	Date of Submission:	11/7/05
Lexicon Contract Name:	DNA340	Mutation Type:	X Standard Knock out
LexVision Name:	MEM730N1		☐ Conditional
Reference accessions:	NM_146149	Is this gene X-linked?	NO

Required Materials:

☐ pKOS clone DNA(s) __pKOS-65_____
☐ Target Vector DNA __pKOS-65TV_____
☐ Targeted ES Cell DNA __1H8_____
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	12/13	16/17
Restriction Enzyme for Genomic Digest:	EcoRV	ApsI
Predicted Wild-type Band (kb):	17.3	7.5
Predicted Mutant Band (kb):	13.6	9.6
Probe Size (bp):	292	157

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:	F	5' Primer Name:	IRES GT Ext
3' Primer Name:	R	3' Primer Name:	1
Predicted Wild-type Band (bp):	139	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	213

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**

12 5' – CAGGGAGGAGTCTGCACATGGGTGTC
 13 5' – GAGTCATCAAGCTGCTCTGAAATGGG
 16 5' – CAACTTTGTGTTTGAGTCAC
 17 5' – GTCTGTGTTTTGAAGTTGGAAC

PCR Genotyping

F 5' – CAGATGACTGTGAGATCCTGAAGG
 R 5' – TCAATGAAATGGCCAACACCAGTG
 1 5' – GAGCTCTCTCCACCCAGGCAGTG
 IRES GT Ext 5' – GCTAGACTAGTCTAGCTAGAGCGG

Genomic Sequence Deleted:

CACAAATGTCCTGCAAGAAATGGTGTCTCCAGCAGCCAGGCCAAGTGGATCCTTGCTGGCAGTGTCACTGTGACACTGGTGTGGCCATTTCATTGATCCT
AGGCCTAACCCCTGCATCAGGGCACCACACAGGTAAGGACCTTCCCTCTCCCTGCCATCTCCCAACTTCTCATTCTTACCTCACTGAGCTCTGCCCAT
TATGCAGCTCTACTCTGATCTACTTCTAAACAACCTCCCTGGTATCATGCCCCACAGACCTAATTCCCTCCACTGGAGATAGCTTTCCCTCCAGGAGGACCA
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TGGTACCACGCAGCCAACAGCAAGAAAGAGATGGCAGCTGCCCTAACAGTAAGTCTAGCCACC

Genomic Locus: (The deleted sequence represents nt 15404-17057 in the sequence below. KOS65 used to generate the TV represents nt 8921-20291 in the sequence below.)

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[illegible]

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Selection Cassette: LacZ/Neo

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Targeted Locus:

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