



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ850	Date of Submission:	5.17.04.
Lexicon Contract Name:	DNA179A	Mutation Type:	<input checked="" type="checkbox"/> Standard Knock out
LexVision Name:	SEC484N1		<input type="checkbox"/> Conditional
Reference accessions:	ENSMUST00000059294; XM_145954	Is this gene X-linked?	No

Required Materials: pKOS clone DNA(s) 30_61
 Target Vector DNA 61-TV
 Targeted ES Cell DNA 2C8
 Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	9+10	11+12
Restriction Enzyme for Genomic Digest:	NcoI	EcoRI
Predicted Wild-type Band (kb):	8.9 kb	8.6 kb
Predicted Mutant Band (kb):	6.6 kb	4.1 kb
Probe Size:	211 bp	232 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:	13	5' Primer Name:	Neo3A
3' Primer Name:	14	3' Primer Name:	5
Predicted Wild-type Band (bp):	275 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	235 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**

DNA179A-9 5' – CTTCAGGGGATGAAAGC
DNA179A-10 5' – CAGTGCCTCATCTAAAC
DNA179A-11 5' – CTGTGACATGAGATGTCC
DNA179A-12 5' – TCTGGAAGTGACAGGAC

PCR Genotyping

DNA179A-13 5' – GACATCAATCTGAGCCATAAC
DNA179A-14 5' – ATGAAGGCATCTGGGTTGATG
DNA179A-5 5' – GTAGACTCTCCACAGGCATTGG
Neo3A 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ATGCTGTGCTCTCTGTTCCCTGCTGCTGCTGGCCGTGGGCAGAGTGCAGACGACTCGGCCGTGTTTCCCTGGC
TGCCAGTGTGAAGAAGAGACATTCGGCCTCTTTGACAGTTTCAGCCTGATCCGTGTGGACTGCAGCAGCCTG
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GGCCTGAGGC

Genomic Locus: (The deleted sequence represents nt (5,553 – 6,637) in the sequence below. KOS61 used to generate the FTV represents nt 601-9023 in the contig below.)

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C

Selection Cassette:

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