



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ6122	Date of Submission:	1-16-05
Lexicon Contract Name:	DNA424A	Mutation Type:	X Standard Knock out
LexVision Name:	SEC591N1		☐ Conditional
Reference accessions:	XM_131719	Is this gene X-linked?	No

Required Materials:

pKOS clone DNA(s) not available
 X Target Vector DNA ScramblerTVneo
 X Targeted ES Cell DNA 3D6
 X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	10+11	12+13
Restriction Enzyme for Genomic Digest:	Acc65I	BamHI
Predicted Wild-type Band (kb):	7.7	8.3
Predicted Mutant Band (kb):	4.7	5.4
Probe Size:	250 bp	268 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:	DNA424-15	5' Primer Name:	Neo3a
3' Primer Name:	DNA424-14	3' Primer Name:	DNA424-14
Predicted Wild-type Band (bp):	343	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	431

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**

DNA424-10 5' – GAGTTTGAGGATTTGAATTGGG
 DNA424-11 5' – GATAGGCGCTGTCTGTCATCT
 DNA424-12 5' – CAGGAACGCAGCGATCTCTG
 DNA424-13 5' – GAAGCAATCGTGCAGAGTAAGC

PCR Genotyping

DNA424-15 5' – AGGAACCGAAGCCAAGTACCAC
 DNA424-14 5' – TGGTCAAGGAGGGCAACTGAA
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ACGCCCCCGCTGCCCAGGTTTGGCTCTGGCTAGCCGGGCGAGTGTAGTCAAGAAAGGACGCGCCACACCAGCTGTCCG
CCGACCCCCAGTCCCGGCCCCCGCGCTCATGGCCGCACCCGGACCCCGCGCCTTGCGTGCTGCTCTCTGCGGCGGTTGT
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GGAGAGGGGGTTTATTGTGGATGCCCTGTCTCCTCAGCTTCCCATCATCATTCCACAGAGGAACCGAAGCCAAGTACCA
CAGGTAGGGTCTCCCCGGGAATGGGGACAG

Genomic Locus: *(The deleted sequence represents nt5997-7365-in the sequence below. pScramblerTV represents nt 1995-11359 in the sequence below.)*

TTGAGGCCAGCCTGGTCTACAAAGTGAGTTCCAGGACAGCCAGGGCTATACAGAGAAACCCTGTCTTAAAAACAAA
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Selection Cassette:

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