



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ8923	Date of Submission:	2-25-04
Lexicon Contract Name:	DNA457	Mutation Type:	X Standard Knock out
LexVision Name:	SEC241N1		☐ Conditional
Reference accessions:	NM_015775	Is this gene X-linked?	No

Required Materials:

- ✓ pKOS clone DNA(s) __pKOS17__
- ✓ Target Vector DNA __DNA457 TV__
- ✓ Targeted ES Cell DNA __3F9__
- ✓ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' Internal</u>
Name of Probe:	DNA457-10/24	DNA457-21/22
Restriction Enzyme for Genomic Digest:	BamHI	EcoRV
Predicted Wild-type Band (kb):	2.8	12.4
Predicted Mutant Band (kb):	1.9	14.6
Probe Size:	459 bp	168 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:	DNA457-5	5' Primer Name:	Neo3a
3' Primer Name:	DNA457-9	3' Primer Name:	DNA457-9
Predicted Wild-type Band (bp):	288 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	233 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**

DNA457-10 5' – GCACTAGGATTACAGTTG
 DNA457-24 5' – CTGCTCTATGATTGTAATTTC
 DNA457-21 5' – GAGATCAGTGCTTCCAGG
 DNA457-22 5' – CAATACAATGCCAGGGGAC

PCR Genotyping

DNA457-5 5' – CGGACCTTGCTATGAGAACC
 DNA457-9 5' – GACAAGGTAGGAGAAATAAGAG
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

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[illegible]

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Selection Cassette:

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GTCTTTGCCGACCGCACGCGCATCCAGCGCTGACGGAAGCAAAACACCAGCAGCAGTTTTTCCAGTTCGGTTTATCCGGGCAAAACCATCGAAGTGAC

Targeted Locus:

CTGTGAACAGGGCATTAAACCCATAATTTTTGACTGCTGAATGAAGACCTTTTACATGTCTCAGTTTTAGCTTTTTGTAGCCTGGTTGGCTGTTGGTGTC
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