



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ700	Date of Submission:	11/4/05
Lexicon Contract Name:	DNA112	Mutation Type:	X Standard Knock out
LexVision Name:	SEC470N1		☐ Conditional
Reference accessions:	ENSMUST00000009018; XM_146529	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __pKOS-75_____
☐ Target Vector DNA __pKOS-75TVNeo_____
☐ Targeted ES Cell DNA __2C7_____
☐ Genomic Map

Southern Blot Analysis: External/Internal Probe Strategies

	<u>5' External</u>	<u>3' Internal</u>
Name of Probe:	17/18	19/20
Restriction Enzyme for Genomic Digest:	EcoRV	BglII
Predicted Wild-type Band (kb):	16.4 kb	15.4 kb
Predicted Mutant Band (kb):	10.2 kb	20.3 kb
Probe Size:	500 bp	479 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:	DNA112-7	5' Primer Name:	Neo3a
3' Primer Name:	DNA112-8	3' Primer Name:	DNA112-8
Predicted Wild-type Band (bp):	464 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	338 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**

DNA127-17 5' – CGGGTGGTGCTCTGAAGGAAA
 DNA127-18 5' – GTTCAATCCTGGGCAATACCTC
 DNA127-19 5' – ACACAGTGTCGCTTGTTATTGC
 DNA127-20 5' – TTGAAGAAAGCTAGAGTTGGG

PCR Genotyping

DNA127-7 5' – ATTCCGACGAAATCAATGC
 DNA127-8 5' – CCCTTTGTCATGCGAAGAGTAA
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

TCCGAGGCACCAAAGTTCATAAGAAATGCTACCTTGCTTCAGAAAGCCCTCAAGCATTACCACGGAAGCCAACGAAGACTGCATTTCCAAGGGAGGGACC
CTGGTTGTCCCCAGGAATCTGACGAAATCAATGCCCTTCGAGACTATGGTAAGAGGAGTCTGCCAGGTGTCAATGACTTTTGGCTAGGCATAAATGAC
ATGGTCACAGAAGGCAAGTTCCTCTGACCCACCGATTCCCTAGCTGTCTCTCTCCTCAACTGGGACCTGGCCAGCCAAAGTGGTGCCCAAGCGGGAACCTG
TGCTCTGTTCTCCAGTCAGCTCAGGGGAAATGGAGCGACGAGGCCTGTGCGAGTAGCAAGCGATACATATGTGAGTTTATCATCCCATAGAAGCCC
CTCCATATCCTC

Genomic Locus: (The deleted sequence represents nt 9671 – 10075 in the sequence below. KOS75 used to generate the TV represents nt 8832 – 18957 in the sequence below.)

CCTGCGTTTGTCTGTTTGTGTCTCTGGCTTATGAGTTTGTCTTCTGTTGTGAGCGTGGGCATATGGGATAGGTTAAAGGATAACTTTCCGGGTAGCT
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