



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ699	Date of Submission:	7/13/04
Lexicon Contract Name:	DNA111	Mutation Type:	X Standard Knock out
LexVision Name:	SEC425N1		☐ Conditional
Reference accessions:	ENSMUST00000028612 BC031841	Is this gene X-linked?	NO

Required Materials: X pKOS clone DNA(s) pKos-DNA111-16
X Target Vector DNA pKos-DNA111-16TV
X Targeted ES Cell DNA 2D11
X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	DNA111(11/12)	DNA111(17/18)
Restriction Enzyme for Genomic Digest:	XhoI	SpeI
Predicted Wild-type Band (kb):	~60 kb	12.5kb
Predicted Mutant Band (kb):	11.5kb	13.6kb
Probe Size:	499bp	424bp

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:	DNA111-5	5' Primer Name:	Neo3A
3' Primer Name:	DNA111-10	3' Primer Name:	DNA111-3
Predicted Wild-type Band (bp):	431	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	256

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**

DNA111-11 5' – GCTATTGCAGGATCGGGTGAGACT
DNA111-12 5' – GCTGGGCGGCTGGATGCTATT
DNA111-17 5' – CCAGCAAACAGGCAGGATG
DNA111-18 5' – TAATGGGGCAGATGGAAATAGTT

PCR Genotyping

DNA111-3 5' – CCCACAATTAGGAATATCATCC
DNA111-5 5' – GGTCCCGCAGCCATTCTACTT
DNA111-10 5' – CCCAACTGCGCCCATCTGTCTA
Neo3A 5' GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

ATGGAGCTAGACAGATGGGCGCAGTTGGGGCTGGTGTTCCTGCAGCTCCTTCTCATCTCATCGTTGCCAAGAGGTA
CTGTTAGTGACCAGGAGCCCTTTGCGGGTCTGATGGGGAGCTGGAC

Genomic Locus: (the deleted sequence represents nt-10168-10291-in the sequence below)

GCTATTGCAGGATCGGGTGAGACTGGTAGGGGTGACCATCTCTCTGGGGGTGCCAGAAAGGGTGAGCAGAAGCTAAAA
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Selection Cassette: LacZ/neo

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