



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ852	Date of Submission:	9/18/03
Lexicon Contract Name:	DNA125	Mutation Type:	X Standard Knock out
LexVision Name:	CYTO10_1		☐ Conditional
Reference accessions:	ENSMUST00000027673, NM_021380	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __KOS87_____
 ☐ Target Vector DNA __KOS87-TV_____
 ☐ Targeted ES Cell DNA __18-2_____
 ☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	41/42	37/40
Restriction Enzyme for Genomic Digest:	BglII	XbaI
Predicted Wild-type Band (kb):	17kb	8kb
Predicted Mutant Band (kb):	22kb	12.5kb
Probe Size (bp):	402bp	606bp

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:	GT1	5' Primer Name:	Neo3a
3' Primer Name:	GT2	3' Primer Name:	GT2
Predicted Wild-type Band (bp):	244bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	330bp

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**

41 5' – CAAGGTCCAAATGCATTGG
 42 5' – GAGCACGTGATTCGTTTTAGG
 37 5' – ATAGTGTGTCGTTATTGTTGCTAGTC
 40 5' – CATAAGCTCCCAATACAGTGCC

PCR Genotyping

GT1 5' – TGAGATTTCGGGATAGTGTG
 GT2 5' –GCCAAGGTCTTAGATAGCAAA
 Neo3a 5' –GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

CTCCAGGATCTAGGTGTAAGATGAAAGGCTTTGGTCTTGCCCTTTGGACTGTTCTCCGCTGTGGGTTTTCTTCTCTGGACT
CCTTTAACTGGGCTCAAGACCCTCCATTTGGGAAGCTGTGTGATTACTGCAAACCTACAGGCAATACAAAAGGAATTTT
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Genomic Locus: *(the deleted sequence represents nt 10048-10286 in the sequence below)*

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[illegible]

[illegible]

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Targeted Locus: 1.131719669-131763773

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