



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ431	Date of Submission:	6-24-05
Lexicon Contract Name:	DNA371	Mutation Type:	X Standard Knock out
LexVision Name:	MEM760N1		☐ Conditional
Reference accessions:	ENSMUST00000062037	Is this gene X-linked?	No

Required Materials:

☐ pKOS clone DNA(s) __pKOS32____

☐ Target Vector DNA __pKOS-32 TVpuro____

☐ Targeted ES Cell DNA __1E4____

☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' Internal</u>	<u>3' External</u>
Name of Probe:	21/22	15/16
Restriction Enzyme for Genomic Digest:	Xba I	Bgl II
Predicted Wild-type Band (kb):	8.8 kb	10.0 kb
Predicted Mutant Band (kb):	4.8 kb	18.7 kb
Probe Size:	324 bp	281 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:	DNA371-1	5' Primer Name:	DNA371-1
3' Primer Name:	DNA371-4	3' Primer Name:	GT-Ires
Predicted Wild-type Band (bp):	392 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	330 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**

DNA371-15 5' – CACAGCGCTGCCAAAAGAAC
 DNA371-16 5' – GCCGAGCCCACTGATAGAGG
 DNA371-21 5' – GTCCCTTCCCGGTTCTTTCTGAT
 DNA371-22 5' – GCCCTTGCCTGCTAGTTGCTTCT

PCR Genotyping

DNA371-1 5' – GAAGGGAGGGAGGGAGGGAGATAG
 DNA371-4 5' – CTGGGGGAGACTTGGGTGATGC
 GT-Ires 5' – CCCTAGGAATGCTCGTCAAGA

Genomic Sequence Deleted:

ATGAACACTGGTGAATACAACAAGCTGGGCAGTGCAATTGAAGAGGTCTCCAGAGGTAGGAGAAAGAGAATCACCCC
ATCGTCCTCCATGGGTTCTTCTGTCTAATGTTTGCAGTTTGGGAGGGCTGGGGAGAAGAAACGGCAAACCATACAGG
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GTAACCTATCCTCCAGATCTGTATTGGAAAAGAATGATCTCTGTAACCCACAAAGGAACATAC

Genomic Locus: (The deleted sequence represents nt 11561-16191 in the sequence below. KOS32 used to generate the TV represents nt-8442-17282 in the sequence below.)

CAGGAGCTAAAGTCACAAGAGACTATGAGCCAACTGATATGGAAGCTGAGAAATGAACTCTAGTCTTTGACAAAAGCC
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Selection Cassette:

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Targeted Locus:

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