



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ3077	Date of Submission:	11/07/04
Lexicon Contract Name:	DNA437	Mutation Type:	☒ Standard Knock out
LexVision Name:	ENZ791N1		☐ Conditional
Reference accessions:	ENSMUST00000054089, XM_137914	Is this gene X-linked?	No

Required Materials: ☒ pKOS clone DNA(s) KOS79B
 ☒ Target Vector DNA KOS79B-FTV
 ☒ Targeted ES Cell DNA 2H4
 ☒ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	12 + 13	16 + 17
Restriction Enzyme for Genomic Digest:	Pvu II	EcoR I
Predicted Wild-type Band (kb):	4.4	10.8
Predicted Mutant Band (kb):	5.2	4.2
Probe Size:	144 bp	183 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:	DNA437-3	5' Primer Name:	Neo3a
3' Primer Name:	DNA437-4	3' Primer Name:	DNA437-8
Predicted Wild-type Band (bp):	219	Predicted Wild-type Band (bp):	None
Predicted mutant band (bp)	none	Predicted mutant band (bp)	258

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**

DNA437-12	5' – CAGAATGTCCGTCAGCCGTTA
DNA437-13	5' – CCTCCCGAGGACACCCTTAGT
DNA437-16	5' – TCCGCTCAGAGCTAAGTGC
DNA437-17	5' – GCCTCTGGAGTGCGAAGACCT

PCR Genotyping

DNA437-3	5' – CACTGGGCAGCTGGACACTAA
DNA437-4	5' – AACTGGAGCCAAAGGACCGA
DNA437-8	5' – ACTCCTGTTGTACAGTGCTG
Neo3a	5' – GCAGCGCATCGCCTTCTATC

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