



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ638	Date of Submission:	12.21.04
Lexicon Contract Name:	DNA223A	Mutation Type:	x Standard Knock out
LexVision Name:	MEM715N1		☐ Conditional
Reference accessions:	ENSMUST00000021274; NM_025838	Is this gene X-linked?	No

Required Materials: x pKOS clone DNA(s) __KOS17_____
x Target Vector DNA __TV17-2_____
x Targeted ES Cell DNA __2G8_____
x Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	13+14	15+16
Restriction Enzyme for Genomic Digest:	PvuII	XbaI
Predicted Wild-type Band (kb):	9.5 kb	12.0 kb
Predicted Mutant Band (kb):	8.5 kb	9.7 kb
Probe Size:	297 bp	208 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:	-17	5' Primer Name:	Neo3a
3' Primer Name:	-18	3' Primer Name:	-19
Predicted Wild-type Band (bp):	379 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	495 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**

DNA223A-13 5' – CGGCCACGGCTGTGAACAGGGCAC
 DNA223A-14 5' – CTCTGCACGCGCCACATCAGGCC
 DNA223A-15 5' – GGTCATGTGCGTACTAGGCGAG
 DNA223A-16 5' – TTTGCAAGTATAGACAAGGGGAC

PCR Genotyping

DNA223A-17 5' – GTTGTCTCTGGTCCCGGGTAAGAC
 DNA223A-18 5' – TGAGACAGAGCGCGGCTACC
 DNA223A-19 5' – CCCACTCACTTCCGCCTAGC
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

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Selection Cassette: LacZ/Neo

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