



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ294	Date of Submission:	7.29.2004
Lexicon Contract Name:	DNA219	Mutation Type:	☒ Standard Knock out
LexVision Name:	MEM779N1		☐ Conditional
Reference accessions:	NM_145581 ENSMUST00000012798	Is this gene X-linked?	No

Required Materials: ☒ pKOS clone DNA(s) KOS-30
☒ Target Vector DNA DNA219-30-TV
☒ Targeted ES Cell DNA 1G1
☒ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	5' External	3' External
Name of Probe:	9+10	11+12
Restriction Enzyme for Genomic Digest:	AseI	Apal
Predicted Wild-type Band (kb):	10.7 kb	10.1 kb
Predicted Mutant Band (kb):	14.7 kb	12.8 kb
Probe Size:	227 bp	111 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:	DNA219-1	5' Primer Name:	Neo3A
3' Primer Name:	DNA219-2	3' Primer Name:	DNA219-5
Predicted Wild-type Band (bp):	176 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	275 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**

DNA219-9 5' – GGGCTAATTCCATCTTCTGAGGG
 DNA219-10 5' – GAAGCCCATCTAGCCATTCTGG
 DNA219-11 5' – CAGGATCCTTTGCCTATCGTTG
 DNA219-12 5' – GAGGAGGAGTGCTGATAGGGAC

PCR Genotyping

DNA219-1 5' – TGCCTCCCATGATGATACACATG
 DNA219-2 5' – GTCACAGGCTTCAATGTCACAGG
 DNA219-5 5' – GGGGAGACTGCAGTATATGAG
 Neo3A 5' –GCAGCGCATCGCCTTCTATC

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Selection Cassette:

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