



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ370	Date of Submission:	1-16-05
Lexicon Contract Name:	DNA235	Mutation Type:	X Standard Knock out
LexVision Name:	SEC516N1		☐ Conditional
Reference accessions:	NM_153420	Is this gene X-linked?	No

Required Materials: X pKOS clone DNA(s) __pKOS26_____
 X Target Vector DNA __pKOS26TVneo_____
 X Targeted ES Cell DNA __2B7_____
 X Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	21+22	16+17
Restriction Enzyme for Genomic Digest:	SpeI	BglII
Predicted Wild-type Band (kb):	23.9	10.9
Predicted Mutant Band (kb):	8.4	15.7
Probe Size:	602 bp	586 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:	DNA235-4	5' Primer Name:	Neo3a
3' Primer Name:	DNA235-3	3' Primer Name:	DNA235-6
Predicted Wild-type Band (bp):	550	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	681

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**

DNA235-21 5' – CAGTTGAGCTGAAGTCTCACCATG
 DNA235-22 5' – GAAGATAGTGGCTTACAGCTGTAG
 DNA235-16 5' – GACACCTAGCTTGTAATGGC
 DNA235-17 5' – CTCCAGGTTCTCTCCATCATC

PCR Genotyping

DNA235-4 5' – CCAGATTGCAGACTCTCAATG
 DNA235-3 5' – CATGGTTTCACCTCCAATCG
 DNA235-6 5' – GAGAGCAACAGAAGGTATCTGG
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

CGATTGGAGGTGAAACCATGAAGAGAACGTAGGCCACACAACAATGCTTCACCGTAATCGCTTCTTGGTGCTGCTGGC
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GAATACGTGTATTCTAAGCTGCTTGCTTATTACTGCAATTTTCTTTGCCATCCATCGCAAGGTACTGGGGAT

Genomic Locus: *(The deleted sequence represents nt9042-9508-in the sequence below. pKOS26 represents nt 5387-14436 in the sequence below.)*

[illegible]

[illegible]

TGTAAAGTTGGTAGAATAAAATTACAGCTTTTCATGGATAGAAAATTAAGGATCTTACTCAGTATTATAAAAAGTAAAAG
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[illegible]

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Selection Cassette:

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Targeted Locus:

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