



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ651	Date of Submission:	1-19-05
Lexicon Contract Name:	DNA265	Mutation Type:	X Standard Knock out
LexVision Name:	SEC500N1		☐ Conditional
Reference accessions:	AK006466, BC057050	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) __pKOS71_____
☐ Target Vector DNA __KOS71TV_____
☐ Targeted ES Cell DNA __1C9_____
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	21+22	28+29
Restriction Enzyme for Genomic Digest:	EcoRV	HindIII
Predicted Wild-type Band (kb):	21.6 kb	5.5 kb
Predicted Mutant Band (kb):	7.6 kb	9.9 kb
Probe Size:	381 bp	583 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:	DNA265-56	5' Primer Name:	DNA265-55
3' Primer Name:	DNA265-57	3' Primer Name:	DNA265-52
Predicted Wild-type Band (bp):	263 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	482 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**

DNA265-21 5' – ACTGTGGGAAGTCCCATCTTG
 DNA265-22 5' – GAGAGGACATCTCCATTGAAG
 DNA265-28 5' –CAGTAGTAACAAGCTGGGCTG
 DNA265-29 5' – CTCAGCCAGATACCTGGCAAG

PCR Genotyping

DNA265-56 5' –CAAGAAGGCCGTCAGGTACTGAT
 DNA265-57 5' –TAATTGGGTGGAGTCGGTTTAGC
 DNA265-55 5' –CTGTTATCCCTACTCGACCTCG
 DNA265-52 5' –CCATGCCTACCTTGCCAACTA

Genomic Sequence Deleted:

TGCGGGCGTCGCTGCTGCTGTCCGTGCTGCGGCCCCGCGGGGCCCCGTGGCCGTGGGCATCTCTCTGGGCTTCACCCTGAG
CCTGCTCAGCGTCACCTGGGTGGAGGAGCCTTGCGGACCCGGGCGCCCCAACCCGGAGACTCTGAGCTGCCGCCGCG
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Genomic Locus: *(The deleted sequence represents nt13783-17944-in the sequence below. KOS71 used to generate the TV represents nt 11139-19841 in the sequence below.)*

CCACGCCCAGCCTGAGGATGCCGGGGAGTATGTATGTGAGACCCGAGATGAGGCTGTCACCTTCAACGTCAGCCTGGC
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Selection Cassette:

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Targeted Locus:

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