



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ170	Date of Submission:	5-20-04
Lexicon Contract Name:	DNA463	Mutation Type:	☒ Standard Knock out
LexVision Name:	SEC297N1		☐ Conditional
Reference accessions:	NM_011923, ENSMUST00000004208	Is this gene X-linked?	NO

Required Materials: ☒ pKOS clone DNA(s) __pKOS-36_____
☒ Target Vector DNA __pKOS36TV_____
☒ Targeted ES Cell DNA __2D5_____
☒ Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	<u>5' External</u>	<u>3' Internal</u>
Name of Probe:	10+19	20+21
Restriction Enzyme for Genomic Digest:	SpeI	EcoRI
Predicted Wild-type Band (kb):	9.3	10
Predicted Mutant Band (kb):	7.9	6.8
Probe Size:	340bp	303bp

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:	2	5' Primer Name:	Neo3a
3' Primer Name:	5	3' Primer Name:	9
Predicted Wild-type Band (bp):	465	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	316

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**

DNA463-10 5' – CATACCAGCCTTGGCCAGTCCCC
 DNA463-19 5' – GAGGTGTCTGAGGCTGGCTACAC
 DNA463-20 5' – CTGTCTTAGTGGCTAGGTGTCTC
 DNA463-21 5' – CAGTGTAGTATCTTGTTACACTTC

PCR Genotyping

DNA463-2 5' – CATTCTCTCTGACTCCAGGAGAG
 DNA463-5 5' – GCCGCTTCTGCTTAAGCAGCTC
 DNA463-9 5' – GAGCAATGCCATCCCTTGCTC
 Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

TGCAAGGACCATGAGGCCACTGTGTATGACCTACTGGTGGCTTGGACTGCTGGCCACGGTCGGAGCTGCTACAGGCCC
AGAGGCTGACGTTGAGGGCACAGAGGATGGTTCACAGAGAGAGTACATTTACCTCAACAGGTACAAGCGGGCAGGTG
AGTCCCCCGACAAGTGCACCTACACTTTCATTGTGCCCCAGCAGCGGGTCACAGGTGCCATTTGTGTCAACTCCAAGGA
GCCTGAGGTGCACCTGGAGAACCCTGTGCACAAGCAGGAGCTGGAGCTGCTCAACAATGAGCTGCTTAAGCAGAAGCG
GCAGATCGAGACGCTGCAGCAGCTGGTAGAGGTAGACGGAGGCATCGTGAGCGAGGTGAAGCTGCTGCGCAAGGAGA
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TGGAGCACAAGTTCAGCACCTGGCTATGCTGGCACACAACCAATCAGAGGTCAATTGCTCAGCTCGAAGAGCACTGCC
AACGCGTACCTGCAGCCAGGCCTATGCCCCAGCCACCCCCAGCAGCTCCACCTCGGGTCTACCAACCACCCACCTACAA
CCGCATCATCAACCAGATTTCCACCAATGAGATCCAGAGTGACCAGAATCTGAAGGTGCTGCCGCCCTCCTTGCCCACC
ATGCCTGCCCTTACCAGTCTCCCATCTTCCACTGATAAGCCATCAGGTAAGTCCT

Genomic Locus: (the deleted sequence represents nt 8864-9699 -in the sequence below)

TAAGAGCACTAGGATGAGATAGGCAGACTGTAAACAATTCTACAAACACCCAGCAGATGGCGCGAGTCATAAGAGAT
GGCCCTGGGAGCTGATACAGAAGTGAAACTGAGGCTCCGGAACACAGTACCTCCCATGGCCTCTCCATCGGTGGCCC
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Selection Cassette: LacZ/Neo

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