



Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ550	Date of Submission:	
Lexicon Contract Name:	DNA086	Mutation Type:	☒ Standard Knock out
LexVision Name:	PHD222N1		☐ Conditional
Reference accessions:	ENSMUST00000024756, NM_032003	Is this gene X-linked?	No

Required Materials: ☐ pKOS clone DNA(s) 9
☐ Target Vector DNA PHD222N1-9-TV
☐ Targeted ES Cell DNA 1A12, 1E2, 1F7
☐ Genomic Map

Southern Blot Analysis: *External/Internal Probe Strategies*

	<u>5' External</u>	<u>3' External</u>
Name of Probe:	37+38	23+24
Restriction Enzyme for Genomic Digest:	EcoRI	ApaLI
Predicted Wild-type Band (kb):	11.7 kb	11.1 kb
Predicted Mutant Band (kb):	8.8 kb	7.9 kb
Probe Size:	227 bp	323 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:	PHD222-39	5' Primer Name:	Neo3A
3' Primer Name:	PHD222-40	3' Primer Name:	PHD222-42
Predicted Wild-type Band (bp):	440 bp	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	259 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**

PHD222-23 5' – GATCTGTACTCACTGCTCTG
 PHD222-24 5' – GCACTAAGCTTGGAGTAACG
 PHD222-37 5' – CTGTTACTGATCCTGCAG
 PHD222-38 5' – GCAATGGTGCTTACATGACTG

PCR Genotyping

PHD222-39 5' – GTGTCCATGTGAACCAAGTC
 PHD222-40 5' – CATGAGAGGACTGTCAGGTC
 PHD222-42 5' – CTTTCGTACACTGTTACGGCAC
Neo3a 5' – GCAGCGCATCGCCTTCTATC

Genomic Sequence Deleted:

AATGATTCCAAAGTTTCTCCTTGTGTCTTGCACACTGGCTACTCTATGCCATTCCGGCTCCGTTTTCTCTACAG
CCAGAAGAGCAGAAAGTTCTGGTAGTTTCTTTTGATGGATTCCGCTGGGATTACTTATATAAAGTTCCAACC
CCTCATTTCCATTATATCATGAAAAATGGTGTCCATGTGAACCAAGTCACTAATGTTTTCATCACGAAGACC
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GGGATGACCCAGTGCTCTAAGCAAAGGGTGATAGAACTTGACCGCTACCTGGACAAAGAGCACTACACCTT
GATTGATCACTCWCCTGTAGCTGCCATCCTGCCAAAAGAAGGTATGTCTGA

Genomic Locus: (the deleted sequence represents nt (4393-5232) in the sequence below)

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[illegible]

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Selection Cassette:

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Targeted Locus:

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