Lexicon Genetics Incorporated – Genentech Project Materials

Genentech ID:	UNQ306	**Date of Submission:**	10/05/04
Lexicon Contract Name:	DNA273	**Mutation Type:**	X Standard Knock out
LexVision Name:	SEC504N1		☐ Conditional
Reference accessions:	ENSMUST00000039597, NM_181549.2	**Is this gene X-linked?**	No

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Required Materials:
X pKOS clone DNA(s) __pKOS72_____
X Target Vector DNA __pKOS72-FTV (Puro)_____
X Targeted ES Cell DNA __2B4_____
X Genomic Map

Southern Blot Analysis:
External/Internal Probe Strategies

	5' External	**3' External**
Name of Probe:	**15 + 16**	**21 + 22**
Restriction Enzyme for Genomic Digest:	**Sac I**	**EcoR V**
Predicted Wild-type Band (kb):	**8.5**	**8.0**
Predicted Mutant Band (kb):	**9.8**	**11.5**
Probe Size:	**421 bp**	**398 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:	9	5' Primer Name:	14
3' Primer Name:	10	3' Primer Name:	GT-IRES
Predicted Wild-type Band (bp):	508	Predicted Wild-type Band (bp):	none
Predicted mutant band (bp)	none	Predicted mutant band (bp)	402

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

DNA273-15	5' – GTGCAAGGTCACCTCAAAACTTAC
DNA273-16	5' – CCTCCGGAGTACTGAGATTACAG
DNA273-21	5' – GACTTTCAGTTAGGATGAGATATG
DNA273-22	5' – CCAGTTGCCTCTGTGAGAGCAAG

PCR Genotyping

DNA273-9	5' – GAGCCTAGATGGTGCCCAGACC
DNA273-10	5' – GAGTTGATCATCCTGGAGCTT
DNA273-14	5' – CCTGGAATGTCTGTAGGCCAAT
GT-IRES	5' – CCCTAGGAATGCTCGTCAAGA

Genomic Sequence Deleted:

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Genomic Locus: ***(the deleted sequence represents nt-8,784-11,919-in the sequence below)***

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Selection Cassette:

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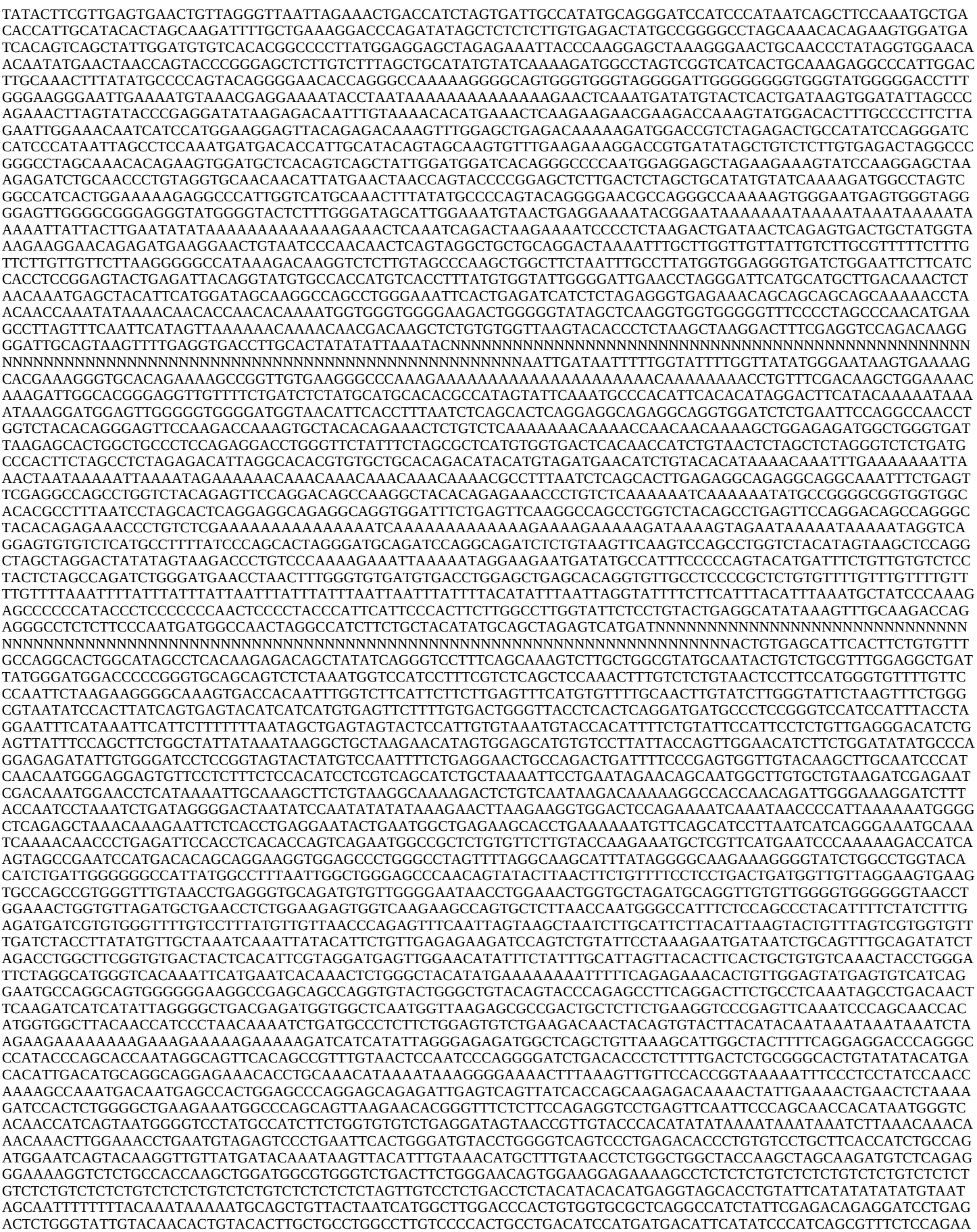

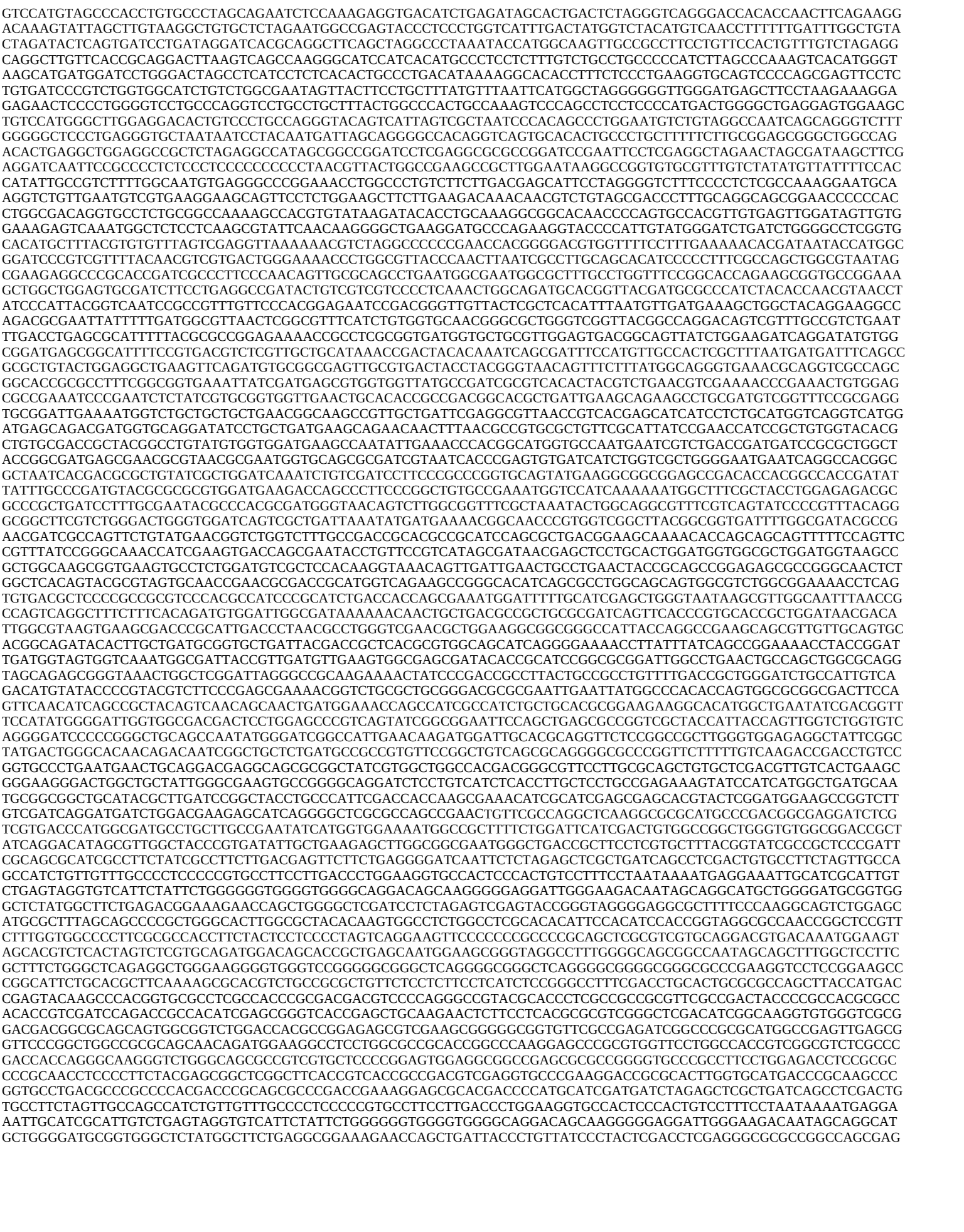

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