

## NIH-0669 Genotyping Strategies

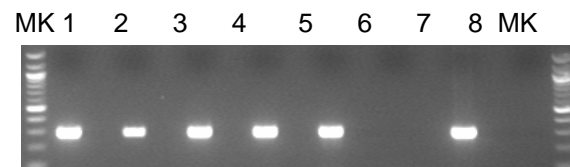
Reaction Components	Vol (ul)
5X GoTaq Buffer	10
25mM MgCl <sub>2</sub>	3.5
10mM dNTPs	1
Primer 20 uM	1
Primer 20 uM	1
5 U/ul Taq polymerase	0.5
Water	28
Total mix volume	45
Tail lysate (1:20 dilution)	5
Total reaction volume	50

Step	Temp	Time	Note
1	94C	15"	
2	65C	30"	Decrease 1C/cycle
3	72C	40"	Go to 1, 10 cycles
4	94C	15"	
5	55C	30"	
6	72C	40"	Go to 4, 30 cycles

Primer Sequences (5' to 3'):	
Mutant PCR: Primer LTR-2 and Primer 0669-3', 292 bp	
Recommended Wt PCR: Primer 0669-5' and Primer 0669-3', 342 bp	
Primer LTR-2	AAATGGCGTTACTTAAGCTAGCTTGC
Primer 0669-5'	AGTCACAAGCTGGGTGGCACTTGC
Primer 0669-3'	ACTCCTCCACGCCAGAACCCTC

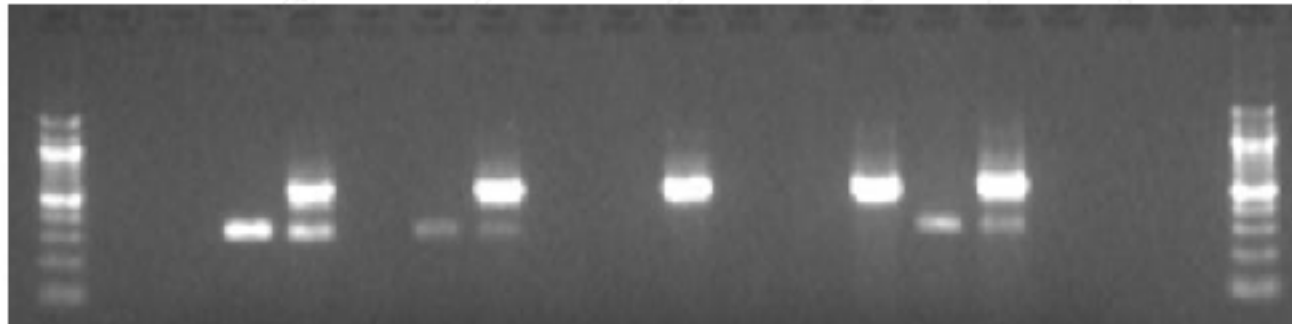
Well	Sample	Genotype
1	3060	het
2	3061	het
3	3069	het
4	3076	het
5	3077	het
6	<b>wt lysate</b>	wt
7	<b>ES DNA</b>	het
8	<b>water</b>	no amp

### Mutant PCR



# QC Expression

RT	-	+	+	-	+	+	-	+	+	-	+	+	+	+	-	-
Actin Primers	-	-	+	-	-	+	-	-	+	-	-	+	-	+	-	+



M	+/+		+/+		-/-		-/-		ES	No	M
Genotype	Spleen		Kidney		Spleen		Kidney		Cell	Template	
Tissue											

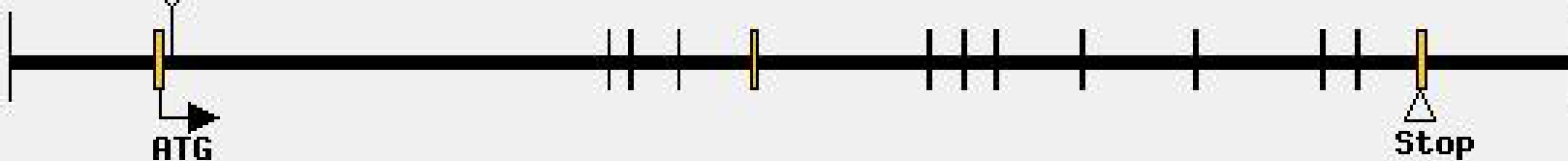
PCR 30 cycles  
Primers:3,4

Mouse ID #109

# QC Image

Accession: NM\_010344

LTR TRAPPING CASSETTE LTR

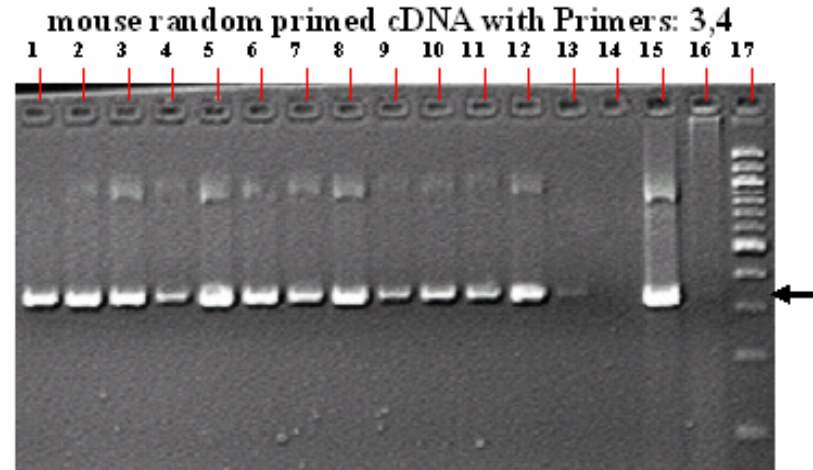


5'

chr8.32527518-32571933

3'

# RT-PCR WT Expression

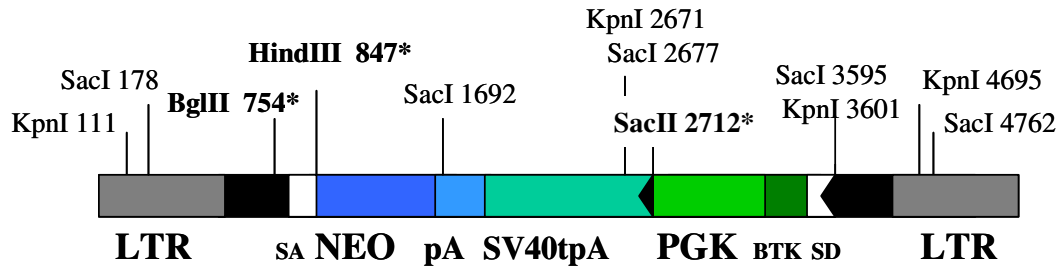


**Note:** Expected band size denoted by arrow adjacent to 100bp ladder/marker.

## Mouse cDNA Tissues

- 1) Brain
- 2) Thymus
- 3) Spleen
- 4) Lung
- 5) Kidney
- 6) Liver
- 7) Testis
- 8) Stomach
- 9) Small Intestine
- 10) Colon
- 11) Heart
- 12) Adipose
- 13) Skin
- 14) (-) Control
- 15) (+) Control- ES cell cDNA
- 16) (+) Control- Genomic/Lex1 DNA
- 17) 100 bp ladder/marker

## VICTR 48 Omnibank Vector



**Total Size:** 5174 nucleotides

**Non-Cutters:** ApaI, XhoI, XmnI

\* Unique sites

### Location of components in VICTR 48:

LTR (viral long terminal repeat): 1-590, 4585-5174

SA (splice acceptor): 755-847

NEO: 867-1684

pA: 1688-1874

pA (SV40 poly adenylation sequence): 1875-2691

frt sites: 2733-2780, 3613-3661

PGK promoter: 2805-3321

BTK exon: 3356-3580

>VICTR 48

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TGAAAGACCCCGCTGACGGGTAGTCAATCACTCAGAGGAGACCCTCCCAAG
GAACAGCGAGACCACAAGTCGGATGCAACTGCAAGAGGGTTTATTGGATACA
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GTTGTGGGCTCTTTTATTGAGCTCGGGGAGCAGAAGCGCGCGAACAGAAGCG
AGAAGCGAACTGATTGGTTAGTTCAAATAAGGCACAGGGTCATTTTCAGGTCC
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