

**GENOTYPING BY PCR PROTOCOL
MUTANT MOUSE REGIONAL RESOURCE CENTER**

sacoord@mmrrc.org
800-910-2291 North America, +1-530-757-5710 International

Please provide the following information required for genetic analysis of your mutant mice.

Note to MAC users: to ensure your graphic can be viewed on a PC please follow the steps below when inserting the graphic into this document. DO NOT drag and drop or copy/paste the graphic into this document.

- Open the original graphic in the program that created it
- Choose File, Save As
- Select No Compression in the save options.
- Save as JPG or PNG or similar format that's compatible with both PC and Mac Word versions.
- Switch to Word, choose Insert, Picture, From File and choose the newly saved picture.

These instructions are very generic. The menu options for your graphics program may be different.

Donating Investigator/PI		Frank Furnari		Email		ffurnari@ucsd.edu		Institution		Ludwig Institute for Cancer Research		Address		9500 Gilman Dr CMMME 3020		City		La Jolla		Lab Contact		Rachel Reed		Email		ratakara@ucsd.edu		Telephone		858 534 7809		FAX		858 534 7830		Strain Name		K125R-FVB	
MMRRC Stock Number		43571																																					

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NAME OF PCR: K125

MMRRC: 0-CTR

Protocol:

(PCR protocol provided by Donating Investigator)

Reagent/Constituent	Volume (µL)
Water	42.1
10x Buffer	5
MgCl ₂ (stock concentration is mM)	
Betaine (stock concentration is 5M) <i>Optional</i>	
dNTPs (stock concentration is 10mM)	1
DMSO <i>Optional</i>	
Primer 1. (stock concentration is 20µM)	0.2
Primer 2. (stock concentration is 20µM)	0.2
Primer 3. (stock concentration is 20µM)	
Primer 4. (stock concentration is 20µM)	
Tag Polymerase 5Units/µL	0.5
DNA (50-200ng/ µL) extracted w/ "Qiagen DNeasy columns or other similar silica based kits"	1
<i>The total volume is auto-calculated based on volumes entered, right click the total and update field to show/recalculate the total volume.</i>	
TOTAL VOLUME OF REACTION:	50.000 µL

Comments on protocol:

Strategy:

Steps	Temp (°C)	Time (m:ss)	# of Cycles
1. Initiation/Melting	94	3.0	1
HOT START? <input type="checkbox"/>			
2. Denaturation	94	0.30	
3. Annealing	50	0.45	30x
steps 2-3-4 cycle in sequence			
4. Elongation	72	1.0	
5. Amplification	72	5.0	1
6. Finish	4	∞	n/a

Primers:

Electrophoresis Protocol:

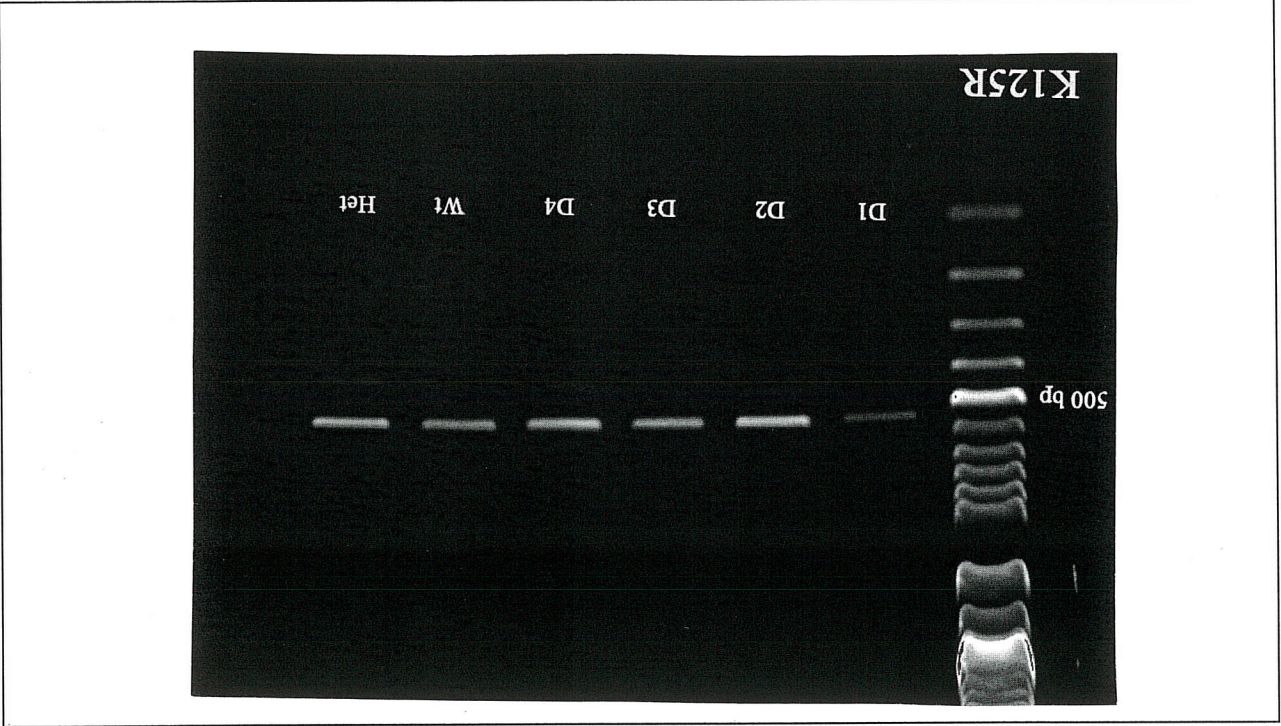
Name	Nucleotide Sequence (5' - 3')	Argarose: 1%	V: 110	Estimated Running Time: min.	Band	Genotype
1. RTL1	CCTGAAAAGTTAG GCTTCTTTAAG					
2. RTL2	AACAGTTCTCAAAAGCATCACACTG					
3.	RTL1 + RTL2				520 bp	Sequence
4.					bp	
5.					bp	

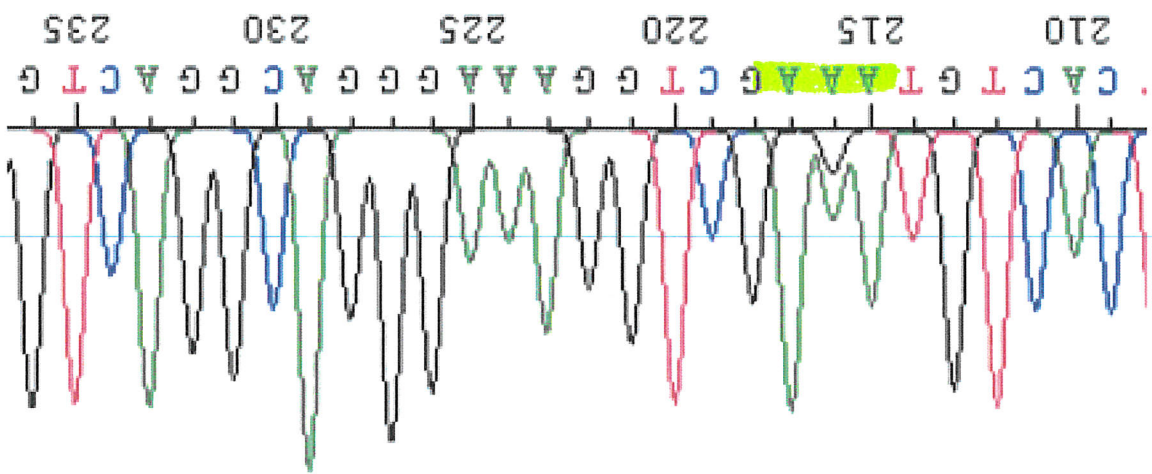
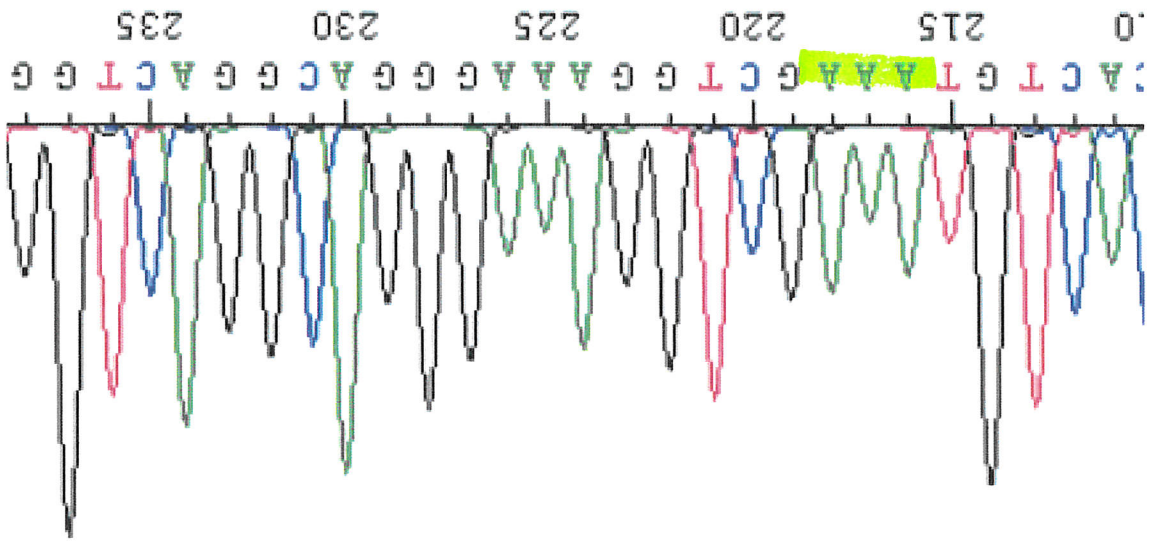
Please size gel images to fit in this space

Protocol / Gel Comments:

After running the PCR, purify, and send to sequencing with RLT1 and see if wildtype, homo, or het.

Gel pictures:





Trace: D1_Rtl.ab1