GENOTYPING BY PCR PROTOCOL
MUTANT MOUSE REGIONAL RESOURCE CENTER: UC DAVIS

mmrrc@ucdavis.edu
530-754-MMRRC

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

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Strain Name **1318-CreER-IRES-GFP**	MMRRC Stock Number **037164**	

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NAME OF PCR: 1318-CreER-IRES-GFP **MMRRC:** 037164-UCD

Protocol: ***(PCR protocol provided by Donating Investigator)***

Reagent/Constituent	Volume (µL)
Water	17.75
10x Buffer (contains 15mM MgCl2)	2.5
$MgCl_2$ (stock concentration is mM)	0
Betaine (stock concentration is 5M) *Optional*	0
dNTPs (stock concentration is 10mM)	1.5
Qiagen Q Buffer	0
Primer 1. (stock concentration is 20µM) Name: **1318.for**	0.5
Primer 2. (stock concentration is 20µM) Name: **1318.rev**	0.5
Primer 3. (stock concentration is 20µM)	0
Primer 4. (stock concentration is 20µM)	0
Taq Polymerase 5Units/µL	0.25
DNA (example) extracted w/ "Qiagen DNeasy columns or other similar silica based kits"	2
The total volume is auto-calculated based on volumes entered, right click the total and update field to show/recalculate the total volume. **TOTAL VOLUME OF REACTION:**	**25 µL**

Comments on protocol:

Strategy:

Steps	Temp (ºC)	Time (m:ss)	# of Cycles
1. Initiation/Melting HOT START? ☐	95	5min	**1**
2. Denaturation	95	30sec	
3. Annealing steps 2-3-4 cycle in sequence	58	30sec	39**x**
4. Elongation	72	30sec	
5. Amplification	72	10min	**1**
6. Finish	4	∞	n/a

Primers:

Name	Nucleotide Sequence (5' - 3')
1.	
2. **1318.for**	GGTTCAAACTGAGAAGCGCC
3. **1318.rev**	ACACTATCCCGTCTTGGGAGA
4.	
5.	

Electrophoresis Protocol:

Argarose: 1 V:120

Estimated Running:Time: 45 min.

Primer Combination	Band	Genotype
#2+#3	500 bp	KO or MT/-
	N/A bp	WT +/+
	bp	

Please size gel images to fit in this space

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Protocol / Gel Comments:

x