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

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NAME OF PCR: STOCK Tg(Ckm-GCGR)1Qwg/Mmucd MMRRC: 036506-UCD

Protocol: (PCR protocol provided by Donating Investigator)

Reagent/Constituent	Volume (µL)
Water	
10x Buffer (contains / without 15mM MgCl <sub>2</sub> )	
dNTPs (stock concentration is mM)	
Primer 1 (stock concentration is 100μM)	
Primer 2 (stock concentration is 100μM)	
Taq Polymerase	
Additives / Other (if applicable):	
DNA sample extracted ☐ NaOH ☐ Proteinase K ☐ Other:	
TOTAL VOLUME OF REACTION:	μL

### Comments on protocol:

We use SIGMA REDExtract-N-Amp<sup>™</sup> Tissue PCR Kit XNAT which includes Extraction solution (24ml), Tissue Preparation solution (3ml), Neutralization solution B (24ml), and REDExtract-N-Amp PCR Reaction Mix (1.2ml, including buffer, salts, dNTPs, Tag polymerase, REDTag dye, and JumpStart Tag antibody).

### Strategy:

Steps		Temp (°C )	Time (m:ss)	# of Cycles
1. Initiation/Meltin	g HOT START?	94	3:00	1
2. Denaturation		94	1:00	
3. Annealing	steps 2-3-4 will cycle in sequence	55	1:00	35
4. Elongation		72	2:00	
<ol><li>Amplification</li></ol>		72	10:00	1
6. Finish		4	n/a	n/a

#### **Primers:**

Name	Nucleotide Sequence (5' - 3')
1: Forward	5'-GCAAAGTGCTATGGGAGGAG
2: Reverse	5'-TCAATGGTGATGATG

## **Electrophoresis Protocol:**

Agarose: 1% **V**: 50 **Estimated Running Time: 45 min** 

<b>Primer Combination</b>	Band	Genotype
Pimer1+2	369 bp	MCK <sup>Gcgr</sup>

