

## MMRRC UNC – Genotyping Protocol

<b>MMRRC Strain ID</b>	37368
<b>MMRRC Strain Name</b>	STOCK Tg(Kcnc1-EYFP)27Bsi/Mmnc
<b>Gene Name(s)</b>	potassium voltage gated channel, Shaw-related subfamily, member 1 (Kcnc1)
<b>Breeding Protocol(s)</b>	Sib-mating
<b>Protocol Date</b>	5/13/15

### MMRRC #37368 PCR Reaction

	<u>1X</u>
ddH <sub>2</sub> O	13
5X Buffer	5
25mM MgCl <sub>2</sub>	2
10mM dNTPs	0.5
10uM Primer 1	1
10uM Primer 2	1
Taq	0.5
DNA	2

**Note: Reaction is for generic EYFP. Cannot determine Tg/+ from Tg/Tg.**

**Thermal Cycler:**

Step 1: 94C, 5min  
 Step 2: 94C, 45sec  
 Step 3: 58C, 45sec  
 Step 4: 72C, 60sec  
 Step 2 to 4 Cycles: 35  
 Step 5: 72C, 7min

**Taq: Apex Taq and Chromataq 5X Buffer**

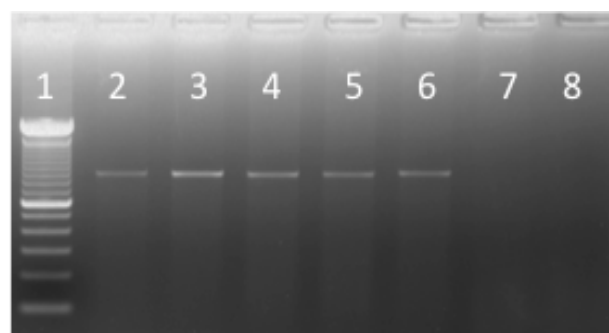
**Bands:** MUT: ~800bp  
 WT: No Band

**Primer sequences 5' to 3':**

MutF(37368): AGAGCAGTGAGCGGAGTGCG

MutR(37368): GCGGACTTGAAGAAGTCGTG

Run on 2.0% agarose gel in TAE.



1. 100bp Marker
2. Mutant Sample
3. Mutant Sample
4. Mutant Sample
5. Mutant Sample
6. Mutant Sample
7. Wild-type Control
8. Negative Control