

## MMRRC UNC – Genotyping Protocol

<b>MMRRC Strain ID</b>	70
<b>MMRRC Strain Name</b>	B6.Cg-Myo5a <sup>flr</sup> Gnb5 <sup>flr</sup> /Mmnc
<b>Gene Name(s)</b>	Guanine nucleotide binding protein, beta 5/flailer (Gnb5) Myosin Va/Flailer (Myo5a)
<b>Breeding Protocol(s)</b>	Intra-strain (Mutant x WildType)
<b>Protocol Date</b>	9/30/13

### MMRRC# 70 PCR Reaction

	<u>1X</u>
DNA	1.0
5X Phusion Buffer HF	4.0
10mM dNTPs	1.0
20 uM Primer 1 & 2	1.0
Phusion Taq	0.2
ddH <sub>2</sub> O	12.7
DMSO	0.6

**NOTE: \*Dilute DNA 1:5 in nuclease-free H<sub>2</sub>O before adding to reaction!**

Set up one 2-primer reaction. Primer pair is: G1F & M5R

Initial – 98°C for 2 min  
 Denaturing: 98°C for 15 sec  
 Annealing Temp.: 62°C for 30 sec  
 Extension: 72°C for 2min  
 Cycles: 36  
 Taq: **NEB Phusion Poly. Kit**

**Bands:** MUTANT 3kb

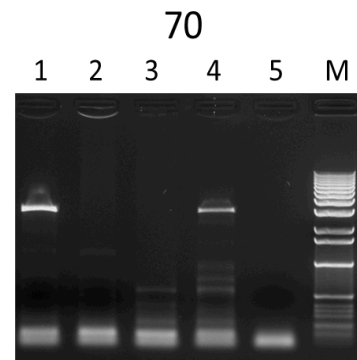
Primers are 10uM with respect to each primer (20uM total).

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

**G1f (70)** TGC AAA GAC AAG CGG AGA ATC GTG

**M5R (70)** GGA ATA GTG ACA TAT CCA GAG GCA CC

Run on **0.8%** agarose gel in TAE.



Lane 1, 4: Mut; Lane 2, 3 : WT; Lane 5 : H<sub>2</sub>O  
 M: 1Kb DNA ladder (Invitrogen)