

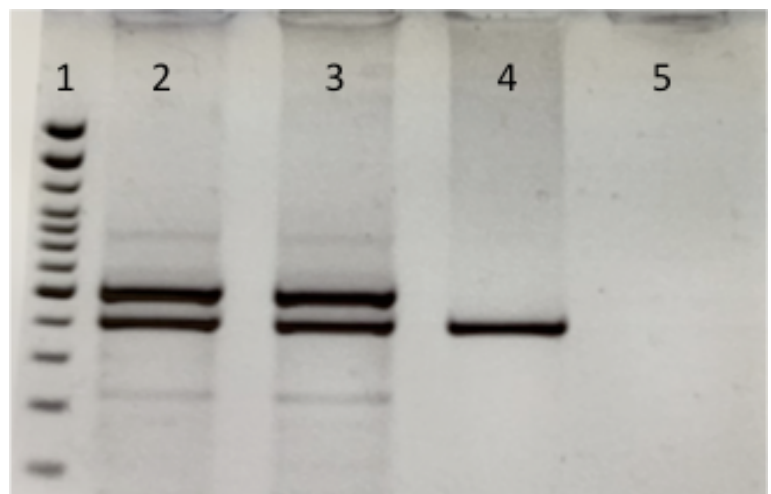
## MMRRC UNC – Genotyping Protocol

<b>MMRRC Strain ID</b>	50522
<b>MMRRC Strain Name</b>	C3Fe.129- <i>Sox10</i> <sup>tm1Weg</sup> /Mmnc
<b>Gene Name(s)</b>	Sox10
<b>Breeding Protocol(s)</b>	Backcross to C3HeB/FeJ
<b>Protocol Date</b>	08/28/2019

### PCR Reaction

	<b>1X</b>
ddH <sub>2</sub> O	13
5X Buffer	5.0
25mM MgCl <sub>2</sub>	2
10mM dNTPs	0.5
10uM Primer 1	1
10uM Primer 2	1
10uM Primer 3	1
Taq	0.5
DNA	2

Run on 2.0% agarose gel in TAE.



1. 100bp Marker (Invitrogen)
2. Heterozygous Sample
3. Heterozygous Sample
4. Wild-type Control
5. Negative Control

#### **Thermal Cycler:**

Step 1: 94C, 5min  
 Step 2: 94C, 30sec  
 Step 3: 55C, 30sec  
 Step 4: 72C, 30sec  
 Step 2 to 4 Cycles: 30  
 Step 5: 72C, 7min

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

Bands: MUT: 600bp  
 WT: 500bp

Primer sequences 5' to 3':

Sox(50522)5: CAG GTG GGC GTT GGG CTC TT  
 Sox(50522)3: CAG AGC TTG CCT AGT GTC TT  
 Sox(50522)Lac: TAA AAA TGC GCT CAG GTC AA