

MMRRC UNC – Genotyping Protocol

MMRRC Strain ID	11668
MMRRC Strain Name	B6;129S5- <i>Slc17a5</i> ^{tm1Lex} /Mmnc
Gene Name(s)	solute carrier family 17 (anion/sugar transporter), member 5 (<i>Slc17a5</i>)
Breeding Protocol(s)	Backcross to C57BL/6J
Protocol Date	7/24/15

MMRRC# 11668 PCR Reaction

	<u>1X</u>
DNA	2.0
5X Buffer	5.0
10mM dNTPs	1.0
20 uM Primer F/R	2.0
Taq	0.5
ddH ₂ O	12.5
25mM MgCl ₂	2.0

2, 2-primer reactions: (18+15) and (20+Neo)

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

Thermal Cycler:

- Step 1: 94°C for 3 min
- Step 2: 94°C for 15 sec
- Step 3: 65°C for 30 sec, decrease 1 degree/cycle
- Step 4: 72°C for 40 sec
- Steps 2-4: 10x
- Step 5: 94°C for 15 sec
- Step 6: 55°C for 30 sec
- Step 7: 72°C for 40 sec
- Steps 5-7, 30x
- Step 8: 72°C for 5 min

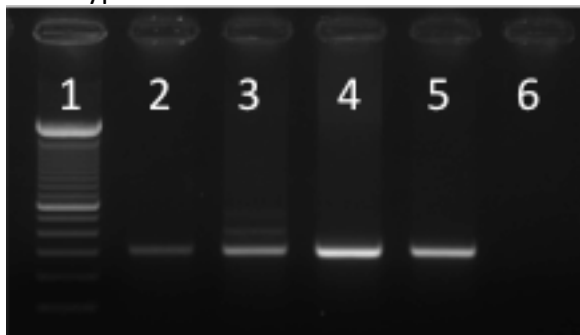
Bands: MUTANT: 450bp
WT: 322bp

Primer sequences 5' to 3': Primers are 10uM with respect to each primer (20uM total).

NIH1513(11668)Neo	GCAGCGCATCGCCTTCTATC
NIH1513(11668) 20	GCTAAGCGGAACCTGGCG
NIH1513(11668) 18	GCTGGTGACACACATCTTGC
NIH1513(11668) 15	CCGCTTCGGTCTGCCGG

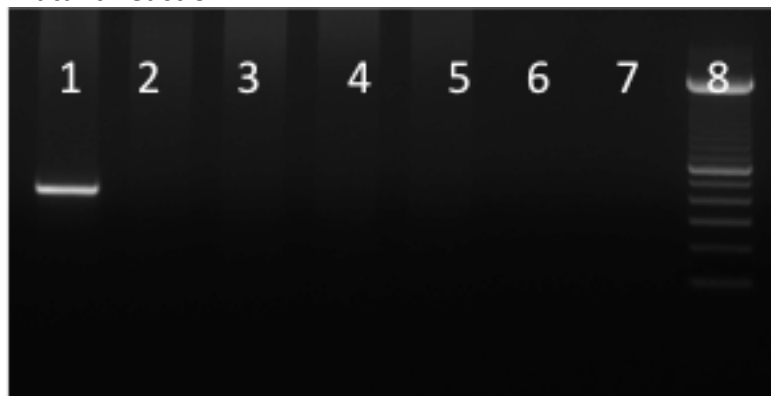
Run on 2.0% agarose gel in TAE.

Wild-type Reaction



1. 100bp Marker
2. Wild-type sample
3. Wild-type sample
4. Wild-type sample
5. Wild-type Control
6. Negative Control

Mutant Reaction



1. Heterozygous sample
2. Wild-type sample
3. Wild-type sample
4. Wild-type sample
5. Wild-type Control
6. Negative Control
7. Empty Lane
8. 100bp Marker