

MMRRC UNC – Genotyping Protocol

MMRRC Strain ID	41427
MMRRC Strain Name	STOCK <i>Aldh1a2^{tm1Gdu}</i> /Mmnc
Gene Name(s)	aldehyde dehydrogenase family 1, subfamily A2 (<i>Aldh1a2</i>)
Breeding Protocol(s)	Intra-strain (het x WT)
Protocol Date	3/5/18

MMRRC #41427 PCR Reaction

NOTE: 4 Primer Reaction.

Thermal Cycler:

Step 1: 94°C, 5min

Step 2: 94°C, 30sec

Step 3: 57°C, 30sec

Step 4: 72°C, 30sec

Step 2 to 4 Cycles: 30

Step 5: 72°C, 7min

	1X
DNA	2.0
5X Buffer	5.0
10mM dNTPs	0.5
10 uM Primer	1/1/1/1
Taq	0.5
ddH ₂ O	11.0
25mM MgCl ₂	2.0

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

Bands: MUTANT: 185bp
 WT: 240bp

Primer sequences 5' to 3':

Ald(41427)WTF GCCTGACCTATTGCATCTCCCG

Ald(41427)WTR GCCATGTAGTGTATTGACCGATTCC

Ald(41427)MutF GAAGCAGACAAGGTGTGTATTGC

Ald(41427)MutR CCTGTCTATATCCACCTGTTA

Run on 2.0% agarose gel in TAE.

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

