

MMRRC UNC – Genotyping Protocol

MMRRC Strain ID	41428
MMRRC Strain Name	STOCK <i>Rdh10^{tm1d(KOMP)Wtsi}/GduMmnc</i>
Gene Name(s)	retinol dehydrogenase 10 (all-trans)
Breeding Protocol(s)	Random intra-strain mating (het male x WT female)
Protocol Date	6/9/2022

PCR Reaction

	<u>1X</u>
ddH ₂ O	11
5X Buffer	5
25mM MgCl ₂	2
10mM dNTPs	0.5
10uM WT Primer F/R	1/1
10uM Mut Primer F/R	1/1
Taq	0.5
DNA	2

Thermal Cycler:

Step 1: 94C, 5min

Step 2: 94C, 45sec

Step 3: 55C, 45sec

Step 4: 72C, 60sec

Step 2 to 4 Cycles: 30

Step 5: 72C, 7min

Taq: Apex and Chromataq 5X Buffer

Bands: MUT: 164bp

WT: 472bp

Primer sequences 5' to 3': Primers are 10uM with respect to each primer

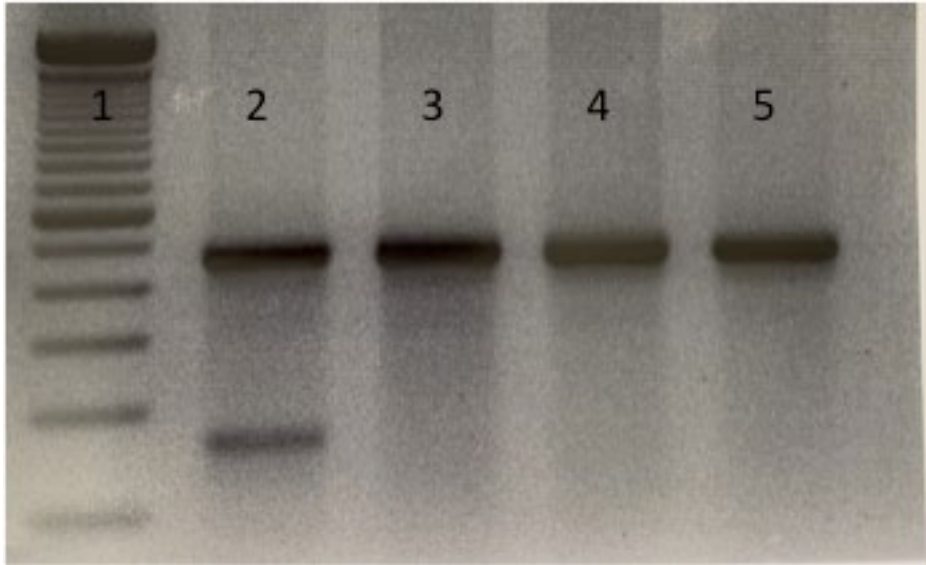
Rdh(41428)WTF: GGC ACC CCA ATC TAC ATC TTA TGT G

Rdh(41428)WTR: AAG CAA CAA TCT AAA CTC ATT CAA AGC C

Rdh(41428)MutF: AAG GCG CAT AAC GAT ACC AC

Rdh(41428)MutR: CGA GCT CAG ACC ATA ACT TCG

Run on 2.0% agarose gel in TAE.



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