

## MMRRC UNC – Genotyping Protocol

<b>MMRRC Strain ID</b>	42283
<b>MMRRC Strain Name</b>	B6J(129S4)- <i>Prdx6</i> <sup>tm5.1Abf</sup> /Mmnc
<b>Gene Name(s)</b>	peroxiredoxin 6
<b>Breeding Protocol(s)</b>	Random intra-strain mating
<b>Protocol Date</b>	6/13/23

### PCR Reaction

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

#### **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 Taq and Chromataq 5X Buffer**

Bands: PCR Product: 160bp

Primer sequences 5' to 3':

DtoA(42283)F      agctggagagagtcaaccac

DtoA(42283)R      cagaagcagctttaccgtca

Run on 2.0% agarose gel in TAE to confirm reaction worked.



**Strain must be sequenced. Use F primer to sequence.**

**WT: T**

**MUT: G**

**Match Sequence with: GTAGAGGATAGACAGCTTCAGTTTCTTGG**