

RMRC Genotyping Protocol-PCR

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|-----|-----------|-------------|----------------------------------|
| No. | RMRC13130 | Strain Name | C57BL/6-Tg(BK5-S100A2)42S1-4LWWL |
|-----|-----------|-------------|----------------------------------|

A. Primer

| | Primer name | Sequence |
|---|---------------|--------------------------------------|
| 1 | Beta-globin-F | 5'-ACA TCC TGG TCA TCA TCC TG-3' |
| 2 | S100A2-FL4 | 5'-GAA TTC AGG GTC GGT CTG GGC AG-3' |

B. Reaction Conditions

| Component | Concentration | | Volume | | Step | Temperature, °C | Time, sec | Number of Cycles |
|------------------|---------------|-------------|--------|----|------|-----------------|-----------|------------------|
| | | | | | | | | |
| H ₂ O | -- | | 13.8 | μl | 1 | 95 | 2 mins | 1 |
| PCR buffer | 10x | | 2 | μl | 2 | 94 | 15s | 35 |
| dNTP | 2 | mM | 2 | μl | 3 | 59 | 30s | 35 |
| Primer 1 | 10 | μM(ρmol/μl) | 2 | μl | 4 | 72 | 30s | 35 |
| Primer 2 | 10 | μM(ρmol/μl) | 2 | μl | 5 | 72 | 5mins | 1 |
| DNA | -- | | | μl | 6 | 4 | ∞ | |
| Taq | 5 | U/μl | 0.2 | μl | 7 | | | |
| Mg ²⁺ | | mM | | μl | 8 | | | |
| Total | | | 20 | μl | 9 | | | |

C. PCR Product

| | Primer set | | Product size | Target region |
|---|---------------|------------|--------------|---------------|
| 1 | Beta-globin-F | S100A2-FL4 | 524 bp | |
| 2 | | | bp | |

D. Gel Photo

