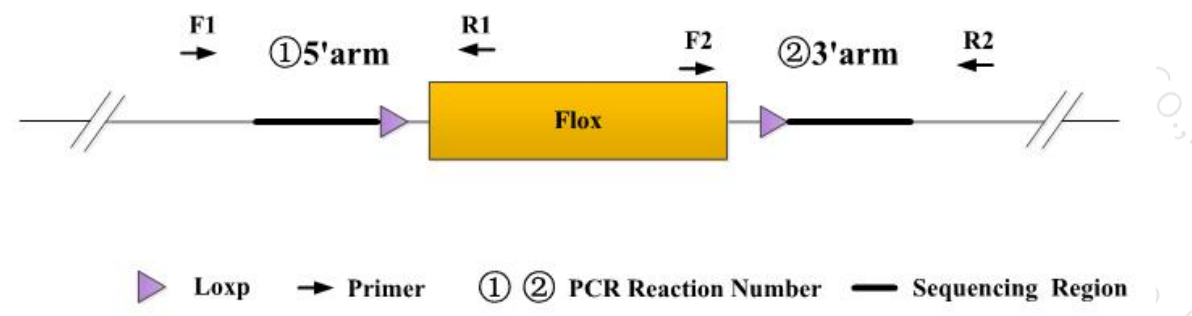


Genotyping Report

| | | | | | |
|-----------|-----------|-------------|----------------|--------------------|-------------|
| Strain ID | T051906 | Strain Type | CKO(Cas9) | Genetic Background | C57BL/6JGpt |
| Designer | Ya'nan Xu | Gene Name | <i>Il18rap</i> | | |

1. Strategy of Genotyping



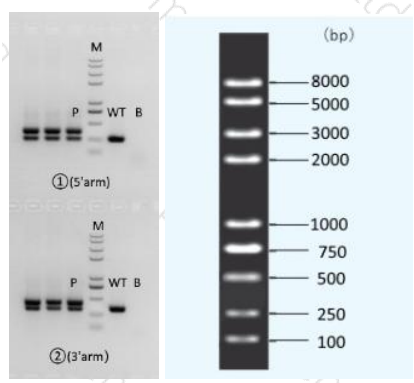
▶ Loxp \rightarrow Primer ① ② PCR Reaction Number — Sequencing Region

Wild type: ①PCR reaction obtains a single WT band; ②PCR reaction obtains a single WT band.
 Heterozygote: ①PCR reaction obtains a WT band and a Targeted band; ②PCR reaction obtains a WT band and a Targeted band.
 Homozygote: ①PCR reaction obtains a single Targeted band; ②PCR reaction obtains a single Targeted band.
 Note: The sizes of WT and Targeted band are shown below.

2. Primer Information

| PCR No. | Primer No. | Sequence | Band Size |
|----------|------------|-----------------------------|----------------|
| ①(5'arm) | T051906-F1 | TTAACACCGCAAGTCTTGTGGTC | WT: 253bp |
| | T051906-R1 | AATGGTTCATGTTCTGGTCACCTC | Targeted:358bp |
| ②(3'arm) | T051906-F2 | GAATCCACAGCATGTTCTCTCTAGTTT | WT: 333bp |
| | T051906-R2 | CTTATGGTGACCTTGAGAAATGAGG | Targeted:439bp |

3. Gel Image & Conclusion



Note: P: Heterozygous samples; WT: Wildtype control; B: Blank control (ddH₂O); M: DNA Ladder

① Control (WT) : It is an important reference mark for whether the PCR reaction is successful and whether the

product band position and size meet the theoretical requirements.

② Control (B) : PCR amplification was performed without template in the PCR reagent to monitor whether the reagent was contaminated.

4. PCR Condition

(Generally recommend to use Vazyme P222; If the sequences contain special structures such as GC% \geq 60% or GC% \leq 40%, recommend to use Vazyme P515.)

| PCR Reaction Component | | | |
|----------------------------------|---|------|-------------------|
| Seg. | reaction component | | Volume (μ l) |
| 1 | 2 \times Rapid Taq Master Mix (Vazyme P222) | | 12.5 |
| 2 | ddH ₂ O | | 9.5 |
| 3 | Primer A(10pmol/ μ l) | | 1 |
| 4 | Primer B(10pmol/ μ l) | | 1 |
| 5 | Template(\approx 100ng/ μ l) | | 1 |
| PCR program ① priority selection | | | |
| Seg. | Temp. | Time | Cycle |
| 1 | 95°C | 5min | |
| 2 | 98°C | 30s | 20 \times |
| 3 | 65°C* (-0.5°C/cycle) | 30s | |
| 4 | 72°C | 45s* | |
| 5 | 98°C | 30s | |
| 6 | 55°C* | 30s | 20 \times |
| 7 | 72°C | 45s* | |
| 8 | 72°C | 5min | |
| 9 | 10°C | hold | |
| PCR program ② the second choice | | | |
| Seg. | Temp. | Time | Cycle |
| 1 | 95°C | 5min | |
| 2 | 98°C | 30s | 35 \times |
| 3 | 58°C* | 30s | |
| 4 | 72°C | 45s* | |
| 5 | 72°C | 5min | |
| 6 | 10°C | hold | |

Note*: Annealing temperature and extension time can be determined according to the actual amplification situation and amplification enzyme efficiency.