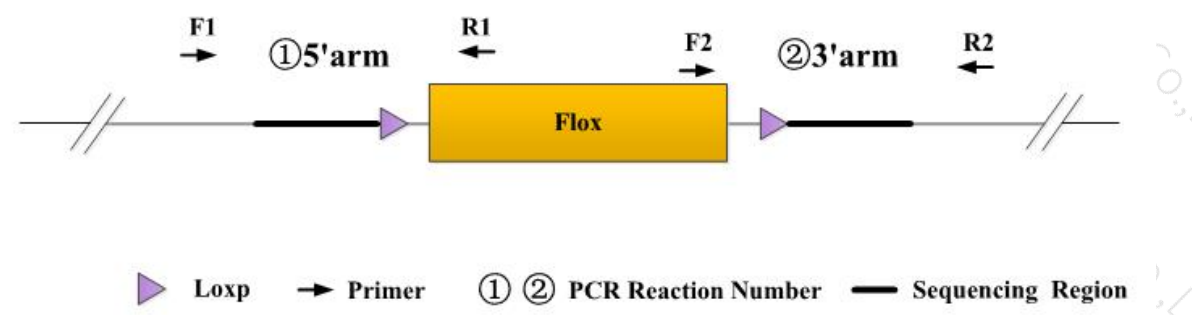


Genotyping Report

Strain ID	T016435	Strain Type	CKO(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Ying Chen	Gene Name	<i>Tnfrsf1b</i>		

1. Strategy of Genotyping

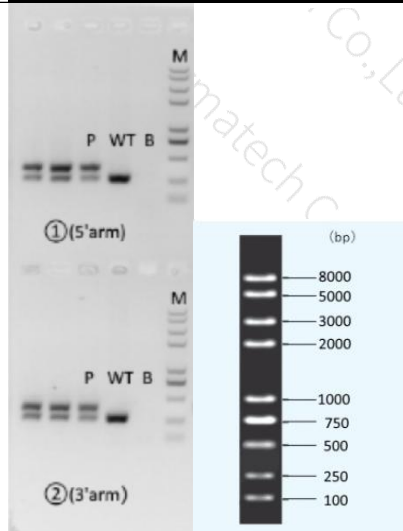


Wild type: ①PCR reaction obtains a single WT band; ②PCR reaction obtains a single WT band.
Heterozygote: ①PCR reaction obtains a WT band and a Targeted band; ②PCR reaction obtains a WT band and a Targeted band.
Homozygote: ①PCR reaction obtains a single Targeted band; ②PCR reaction obtains a single Targeted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

2. Primer Information

PCR No.	Primer Name	Sequence	Band Size
①(5'arm)	T016435(P2)-F1	GTCATTGAAATCATGGCCTAGAGAG	WT:279bp Targeted:384bp
	T016435(P2)-R1	CTGGAAAACATGTGACCCCTGCT	
②(3'arm)	T016435(P2)-F2	TGGCTTTTCTAGTGACGAGCAGAGT	WT:276bp Targeted:382bp
	T016435(P2)-R2	GAATACTTAAGGGAGAATGGGTTTGC	

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% ≥ 60% or GC% ≤ 40%, recommend to use Vazyme P515.)

PCR Reaction Component		
Seg.	Reaction Component	Volume (μl)
1	2 × Rapid Taq Master Mix(Vazyme P222) or 2 × Phanta Max Master Mix (Vazyme P515)	12.5
2	ddH ₂ O	9.5
3	Primer A(10pmol/μl)	1
4	Primer B(10pmol/μl)	1
5	Template(20~80ng/μl)	1

PCR program I priority selection

Seg.	Temp.	Time	Cycle
1	95°C	5min	20×
2	98°C	30s	
3	65°C*(-0.5°C/cycle)	30s	
4	72°C	45s*	15×
5	98°C	30s	
6	55°C*	30s	
7	72°C	45s*	
8	72°C	5min	

9	10°C	hold	
PCR program II the second choice			
Seg.	Temp.	Time	Cycle
1	95°C	5min	
2	98°C	30s	35×
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.