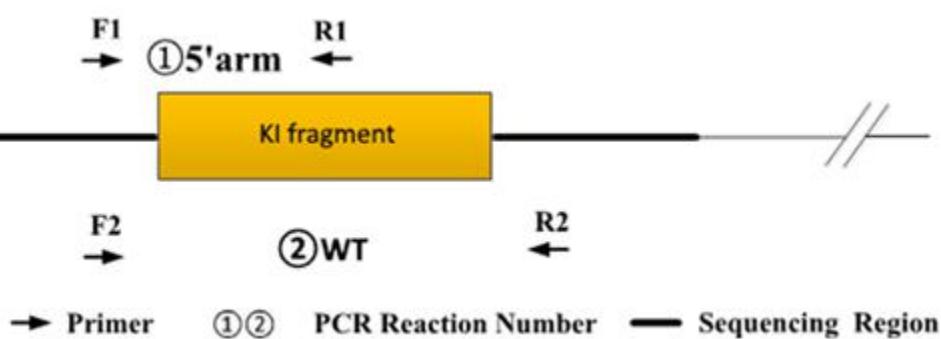




Genotyping Report

Strain ID	T058429	Strain Type	KI(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Tianjiao Wang	Gene Name			<i>Calcr-P2A-iCre</i>

1. Strategy of Genotyping



Wild type: ①PCR reaction obtains none band; ②PCR reaction obtains a WT band.

Heterozygote: ①PCR reaction obtains a Targeted band; ②PCR reaction obtains a WT band.

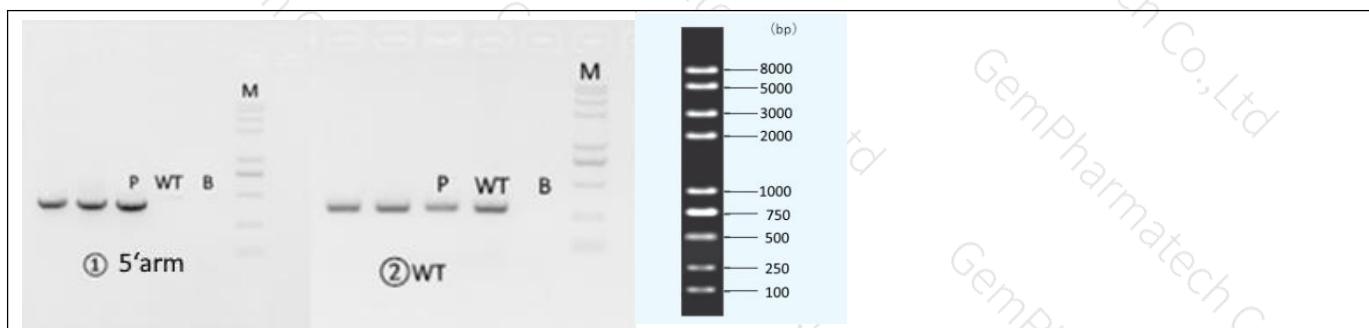
Homozygote: ①PCR reaction obtains a Targeted band; ②PCR reaction obtains none band.

Note: The sizes of WT and Targeted band are shown below. For ②PCR reaction, because the WT band is much smaller than the target band, it is likely to produce dominant amplification, the reaction is only used to judge whether there is a WT allele.

2. Primer Information

PCR No.	Primer No.	Sequence	Band Size
①5'arm备用	T058429-F1A	AGTTAGTGCTCCTCGGGCTGTAG	WT:0bp Targeted:376bp
	T058429-R1A	CTTCCAGGTGTGTTCAAGAGAAGG	
②WT备用	T058429-F2A	AGTGGACGCAGTTCAAGATCCA	WT:315bp Targeted:1443bp
	T058429-R2A	GAGGATGGGAATCACTTGAAACAC	

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

PCR Reaction Component			
Seg.	reaction component	Volume (μl)	
1	2 × Rapid Taq Master Mix (Vazyme P222)	12.5	
2	ddH2O	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*	
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	35×
2	98°C	30s	
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.