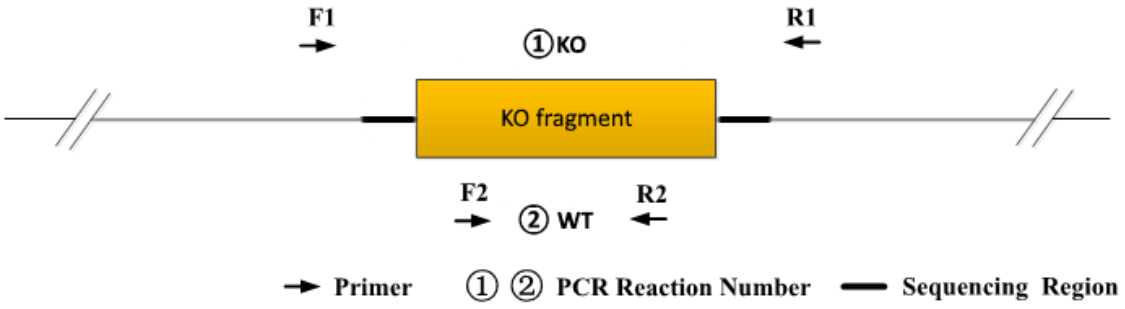
Genotyping Report

Strain ID	T027851	Strain Type	KO(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Yin Chen	Gene Name	*Prkg2*		

1. Strategy of Genotyping



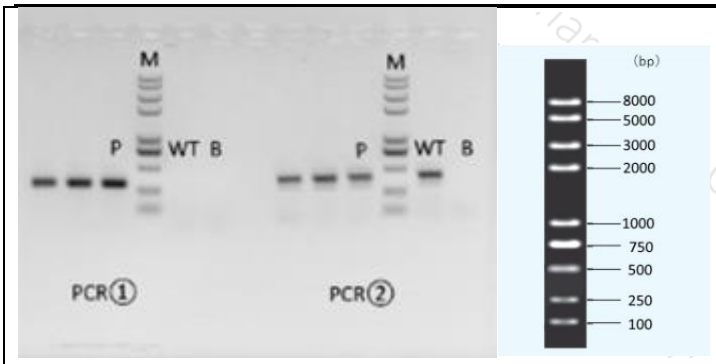
Wild type: ①PCR reaction obtains a single WT band; ②PCR reaction obtains a single WT band.
Heterozygote: ①PCR reaction obtains a WT band and a KO band; ②PCR reaction obtains a WT band.
Homozygote: ①PCR reaction obtains a single KO band; ② PCR reaction without product.
Note：1)The sizes of WT and Targeted band are shown below.
2)If the WT band is too large, it may not be possible to obtain a WT band.

2. Primer Information

PCR No.	Primer No.	Primer Name	Sequence	Band Size
PCR①	F1	JS08784-Prkg2-5wt-tF1	TGCTAACAGAAGGCAGAGGATTC	WT:57299bp KO: 309bp
	R1	JS08784-Prkg2-3wt-tR1	CCCGGAAAGCCATTAACACTATC	
PCR②	F2	JS18784-Prkg2-wt-tF1	TCAGCAGCTAAGGACCATGAAGTC	WT:392bp KO:0bp
	R2	JS18784-Prkg2-wt-tR1	AGACCCGAAACCAAATCTGC	

3. Gel Image

aaaccctgacttccaccacccttcccaagccatgt------***56990bp***------gggcgttttcctgtccagactgacaagctctcggg



Note: P: Positive control; WT: Wildype control; B: Blank control (ddH2O); M: DNA Ladder

4. PCR Condition

PCR Reaction Component			
Seg.	**reaction component**		**Volume (μl)**
1	2 × Taq Master Mix， Dye Plus， (Vazyme P112-03)		12.5
2	ddH2O		9.5
3	Primer A(10pmol/μl)		1
4	Primer B(10pmol/μl)		1
5	Template(≈100ng/μl)		1
PCR program			
Seg.	**Temp.**	**Time**	**Cycle**
1	95℃	5min	
2	98℃	30s	20×
3	65℃（-0.5℃/cycle）	30s	
4	72℃	45s	
5	98℃	30s	20×
6	55℃	30s	
7	72℃	45s	
8	72℃	5min	
9	10℃	hold	

Reviewer:Ting Sun

Date:2020-7-1