

Genotyping Report

Strain ID	T027864	Strain Type	KO(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Hao Yan	Gene Name	Col4a3		

1. Strategy of Genotyping



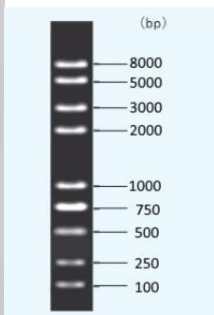
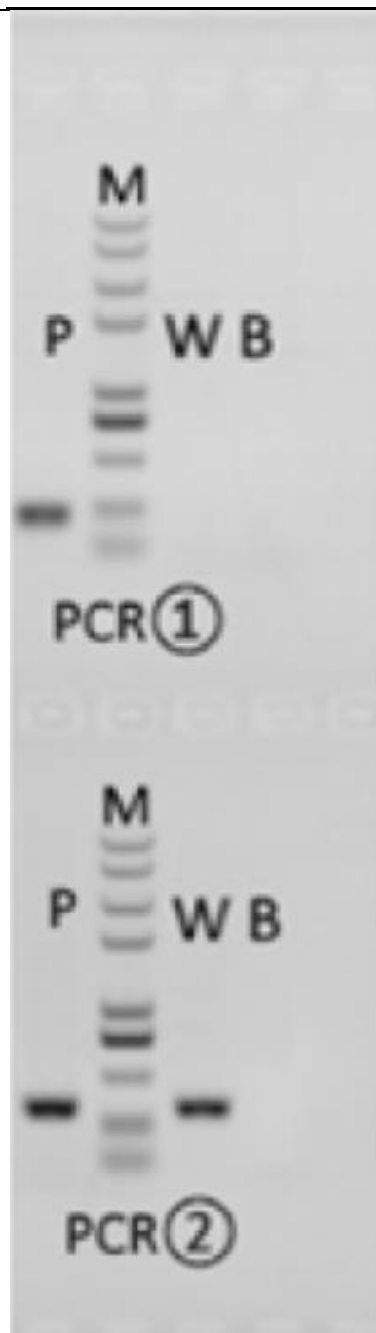
Wild type: ①PCR reaction obtains a single WT band; ②PCR reaction obtains a single WT band.
Heterozygote: ①PCR reaction obtains a WT band and a KO band; ②PCR reaction obtains a WT band.
Homozygote: ①PCR reaction obtains a single KO band; ②PCR reaction without product.
Note: 1)The sizes of WT and Targeted 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	JS08797-Col4a3-5wt-tF1	GGGCCTCAACCCAAGATTCACT	WT:19764bp KO: 234bp
	R1	JS08797-Col4a3-3wt-tR1	AAGGAGGCTATGCTTTCCTTAGGG	
PCR②	F2	JS18797-Col4a3-wt-F1	AGATCCTGAGCCTTGTGATGCTG	WT:332bp KO:0bp
	R2	JS18797-Col4a3-wt-R1	GCAAGTAGTTGAGAGTCTGTGGGA G	

3. Gel Image

ggcacatctcggttatgaagtcctctgcgg---19530bp---ggtgggcatctccaaagatggaatgag
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Note: P: Positive control; WT: Wildtype 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	ddH ₂ O	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