

Genotyping Report

Strain ID	T044850	Strain Type	KO(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Zifan Lin	Gene Name	<i>Igsf11</i>		

1. Strategy of Genotyping



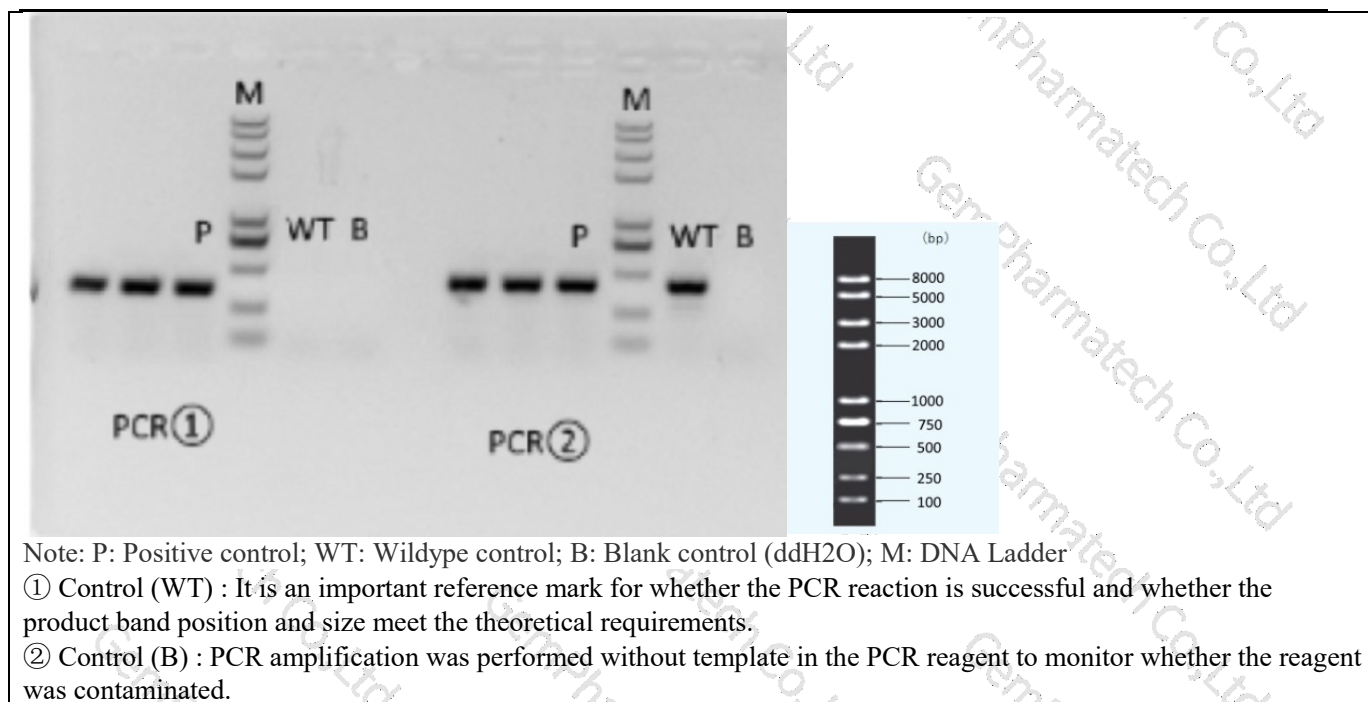
Wild type: ①PCR reaction obtains a single WT band; ②PCR reaction obtains a single WT band.
Heterozygote: ①PCR reaction obtains a WT band and a KO band; ②PCR reaction obtains a WT band.
Homozygote: ①PCR reaction obtains a single KO band; ②PCR reaction without product.
Note: 1)The sizes of WT and Targeted 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.	Sequence	Band Size
PCR①	T044850-F1	AAGAAACCTTAGGCAGCCAGGAG	WT: 4971bp Targeted: 357bp
	T044850-R1	GTCAGTTGTTCACCTGTAACCTCACC	
PCR②	T044850-F2	GTCACCATAGTTCTCAGCTTGCAC	WT: 414bp Targeted: 0bp
	T044850-R2	GACAGGACTATGGAGGTAGATGCTG	

3. Gel Image

gagtgtagccaccagaaggatgcccgtaa---4614bp---ctacgttaaccttctgtaagatgaagggg
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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(≈100ng/μl)		1
PCR program ① priority selection			
Seg.	Temp.	Time	Cycle
1	95℃	5min	20×
2	98℃	30s	
3	65℃* (-0.5℃/cycle)	30s	
4	72℃	45s*	20×
5	98℃	30s	
6	55℃*	30s	
7	72℃	45s*	
8	72℃	5min	
9	10℃	hold	
PCR program ② the second choice			
Seg.	Temp.	Time	Cycle

1	95℃	5min	
2	98℃	30s	35×
3	58℃ *	30s	
4	72℃	45s*	
5	72℃	5min	
6	10℃	hold	

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