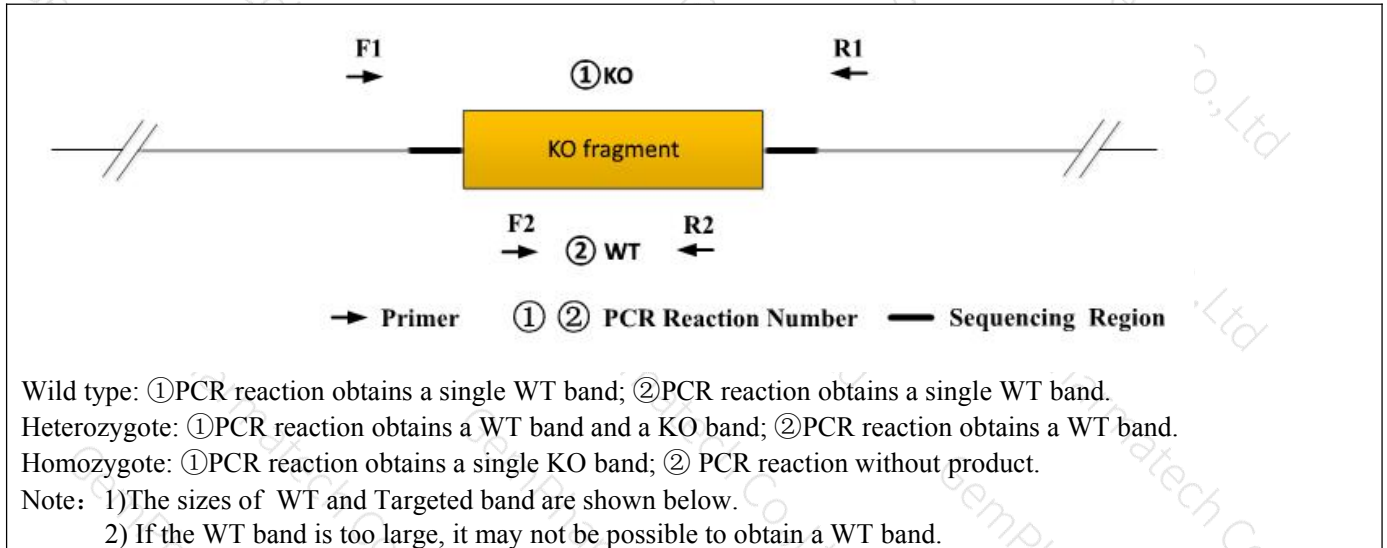


## Genotyping Report

Strain ID	T031657	Strain Type	KO(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Ya'nan Xu	Gene Name	<i>Slc7a5</i>		

### 1. Strategy of Genotyping

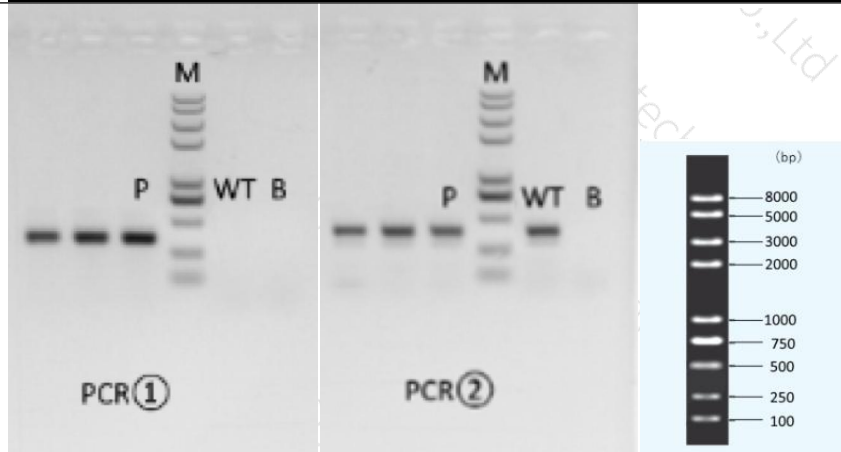


### 2. Primer Information

PCR No.	Primer No.	Primer Name	Sequence	Band Size
PCR①	F1	JS22591-Slc7a5-5wt-tF1	GCCTTGGTTTCCCAACTTATGAG	WT:5921bp KO:335bp
	R1	JS22591-Slc7a5-3wt-tR1	TTGCCTGTCTTGAACGGTCATG	
PCR②	F2	JS32591-Slc7a5-wt-tF1	TAGCTGAAAGCTAATGGGACCACC	WT:381bp KO:0bp
	R2	JS32591-Slc7a5-wt-tR1	CCTTCAAAGGACAACCTTCTGCTGC	

### 3. Gel Image

ccaaagcatcccattgcagagaatgaggggcacgcc---5586bp---agggttccatgcctggtgtgaggactgcag



Note: P: Heterozygous samples; WT: Wildtype control; B: Blank control (ddH<sub>2</sub>O); 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	ddH <sub>2</sub> 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℃	5min	20×
2	98℃	30s	
3	65℃* (-0.5℃/cycle)	30s	
4	72℃	45s*	
5	98℃	30s	15×
6	55℃*	30s	
7	72℃	45s*	
8	72℃	5min	
9	10℃	hold	
PCR program II (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.