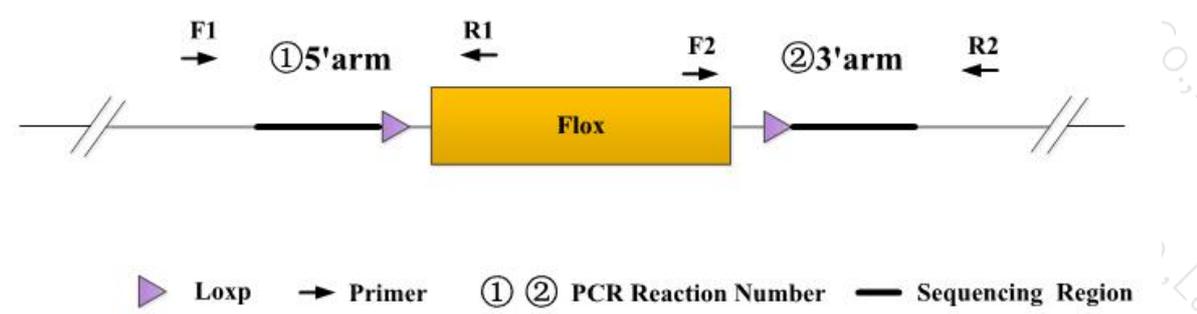


Genotyping Report

Strain ID	T038420	Strain Type	CKO(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Ya'nan Xu	Gene Name	<i>Brdt</i>		

1. Strategy of Genotyping

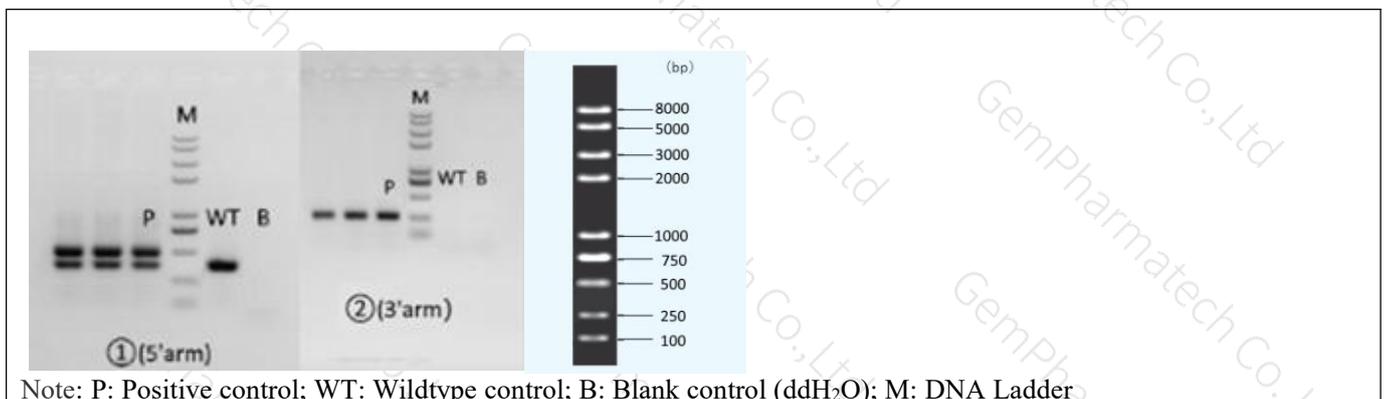


Wild type: ①PCR reaction obtains a single WT band; ②PCR reaction obtains a single WT band.
 Heterozygote: ①PCR reaction obtains a WT band and a Targeted band; ②PCR reaction obtains a WT band and a Targeted band.
 Homozygote: ①PCR reaction obtains a single Targeted band; ②PCR reaction obtains a single Targeted band.
 Note: The sizes of WT and Targeted band are shown below.

2. Primer Information

PCR No.	Primer No.	Sequence	Band Size
①(5'arm)	T038420-F1	GCCTTTCTCAGATAATACCGGG	WT:333bp Targeted:438bp
	T038420-R1	AGCTTGCTGGCACCATAAAGG	
②(3'arm)	T038420-F2	GCATCGCATTGTCTGAGTAGGTG	WT:0bp Targeted:250bp
	T038420-R2	CAATCAATGCTGGATGATGCTC	

3. Gel Image & Conclusion



- 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 ₂ O		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°C	5min	20×
2	98°C	30s	
3	65°C* (-0.5°C/cycle)	30s	
4	72°C	45s*	20×
5	98°C	30s	
6	55°C*	30s	
7	72°C	45s*	
8	72°C	5min	
9	10°C	hold	
PCR program ② 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.

