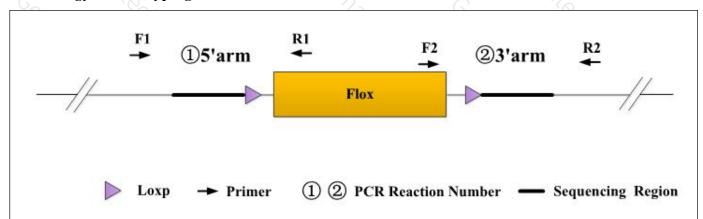


# **Genotyping Report**

Strain ID	T024331	Strain Type	CKO(Cas9)	Genetic Background	C57BL/6JGpt
Designer	Ya'nan Xu	Gene Name	, /×	Dio3	S)

## 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.

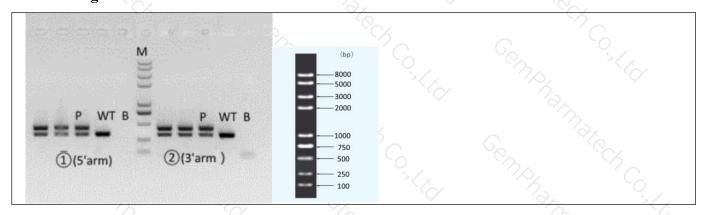
Homozygote: ①PCR reaction obtains a single Targeted band; ②PCR reaction obtains a single Targeted band.

Note: The sizes of WT and Targeted band are shown below.

# 2. Primer Information

PCR No.	Primer No.	Sequence	Band Size
①(5'arm) (GC:68.6%)	T024331(P2)-F1	CGGCGGAACCCAAAGTT	WT: 312bp Targeted: 417bp
	T024331(P2)-R1	24331(P2)-R1 AGCAGTCAGTGGCAATGGT	
②(3'arm)	T024331(P2)-F2	AGAGACCCATGAGGAGATTGGTGA	WT: 310bp
	T024331(P2)-R2 AGATGTGGGAGTTGTGCCTGAGTA		Targeted: 416bp

## 3. Gel Image & Conclusion





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 Comp	onent		9%	
Seg.	reaction component		Volume (μl)	
1	2 × Rapid Taq Master Mix (Vazyme P222)		12.5	
2	ddH2O	0./	9.5	
3	Primer A(10pmol/μl)		1 %	
4	Primer B(10pmol/μl)	× × × × × × × × × × × × × × × × × × ×	1 %	
5	Template(20~80ng/μl)	Template(20~80ng/μl)		
PCR program I pri	ority selection	3/,	20.	
Seg.	Temp.	Time	Cycle	
1 6	95℃	5min	(2) SYE	
2	98℃	30s	20×	
3	65℃* (-0.5℃/cycle)	30s	K. 6.	
4	72℃	45s*	19/2. "SE	
5 ()	98℃	30s	15×	
6	55℃*	30s	10%	
7	72℃	45s*	3. 3/	
8	72℃	5min	(1) (V)	
950	10°C	hold	770	
PCR program II th	e second choice	Cox Ma.	70	
Seg.	Temp.	Time	Cycle	
1. 2%	95℃	5min	Jak Jak	
2	98°C	30s	35×	
3 🔾	58°C*	30s	6	
4	72°C	45s*	700 Store	
5	72℃	5min	75.	
6	10℃	hold	7	

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

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	64 64		
x, C, (x		Ceurphannare County of the Cou	346 Boh Co.,/,
600 Co. (X		Ceubhallage Ceubhallage	~~ ~ ~~
Co. (5%)	**************************************		
17 Co. 1/x	2,42 3,424		
9/4	-3/5°		16,/,