

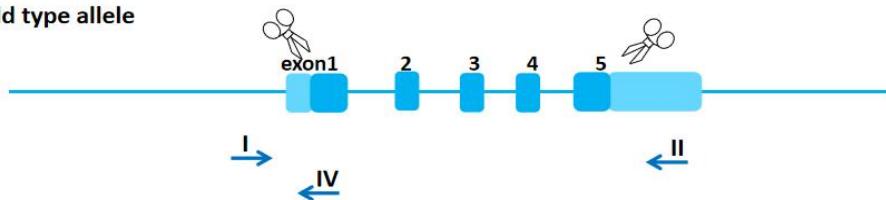
Tacr3-KO (2) Genotyping Protocol



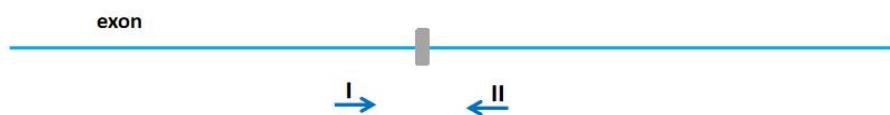
Common Name	Tacr3-KO(2)	Cat. NO.	NM-KO-232216
Strain of Origin	C57BL/6J	Version	V1

Genotyping strategy

Wild type allele



knockout allele



 : coding region  : uncoding region
 : Cas9/gRNA  : mutation

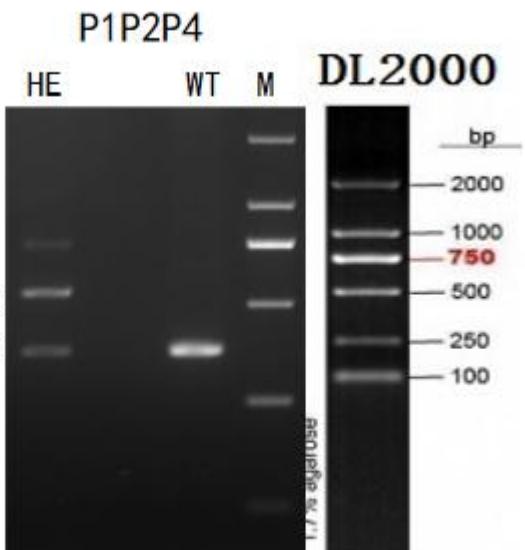
NHEJ : Non-homologous end joining

→ : primer location

Primers

Primer	Sequence (5' → 3')	Primer type
P1	CTGGGGACTCCTGGAGACTA	Forward
P2	AAAACCCCTCTGCTGTTCGG	Reverse
P4	GTCCCGTCCGTCCAGTTTC	Reverse

Expected results

Results	<p style="text-align: center;">P1P2P4</p> 
	<p>Knockout type: -103272 bp</p> <p>Wild type: P1P4 =354 bp</p> <p>Heterozygote: P1P2 =524 bp; P1P4=354 bp</p> <p>Homozygote: P1P2 =524 bp</p>

Note: In both wild-type and heterozygous mice, whether the P1 and P2 primers can amplify larger bands does not affect the interpretation of the results, because the purpose of designing this pair of primers is to amplify KO band

Reaction & Cycling

PCR Reaction System	Reaction Component		Volume (μ l)	
	ddH2O		7.5	
	2×Taq Plus Master Mix		10.0	
	P1(10 pmol/ μ l)		0.5	
	P2(10 pmol/ μ l)		0.5	
	P4(10 pmol/ μ l)		0.5	
	Genomic DNA		1.0	
	Total		20	
	2×Taq Plus Master Mix from Vazyme (Code Number: P222-1)			
Cycling Reaction	Step	Temp	Time	Note
	1	95° C	5 min	
	2	95° C	20 sec	
	3	60° C	20 sec	35 repeats to 2
	4	72° C	20 sec	
	5	72° C	5 min	
	6	12° C	Hold	