

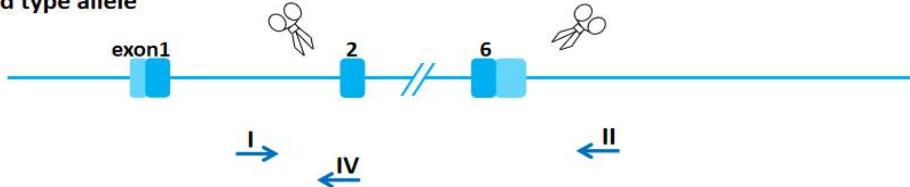
# Nt5c1a-KO Genotyping Protocol



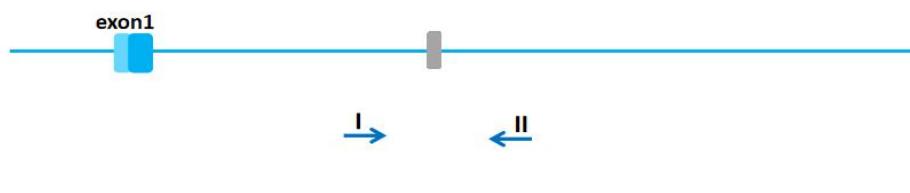
Common Name	Nt5c1a-KO	Cat. NO.	NM-KO-231804
Strain of Origin	C57BL/6J	Version	V1

### Genotyping strategy

Wild type allele



knockout allele



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

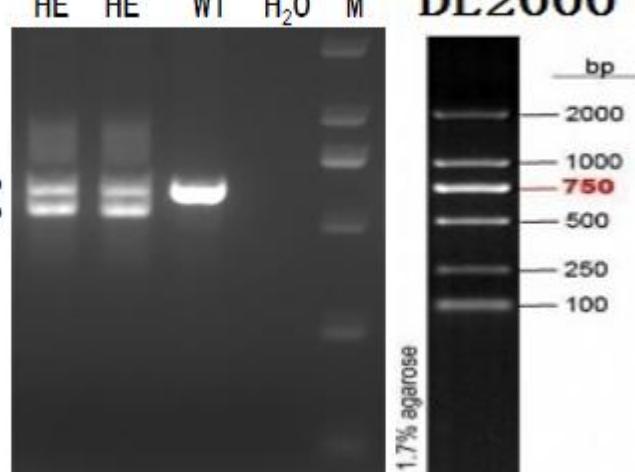
NHEJ : Non-homologous end joining

→ : primer location

### Primers

Primer	Sequence (5' → 3')	Primer type
P1	AGGTGAGGAAAGGGGGAAAGA	Forward
P2	CAGGTGCCATAGGTACCAAGC	Reverse
P4	CTCCGTGTAGATCCTCTGTTCCCTC	Reverse

### Expected results

	<b>P1P2P4</b> 
Results	
Genotype	<p>Knockout type: -8289 bp</p> <p>Wild type: P1P4 = 606 bp</p> <p>Heterozygote: P1P2 = 533 bp; P1P4=606 bp</p> <p>Homozygote: P1P2 = 533 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 ( $\mu$ l)	
	ddH2O		7.5	
	2 $\times$ Taq Plus Master Mix		10.0	
	P1(10 pmol/ $\mu$ l)		0.5	
	P2(10 pmol/ $\mu$ l)		0.5	
	P4(10 pmol/ $\mu$ l)		0.5	
	Genomic DNA		1.0	
	Total		20	
	2 $\times$ 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	
	4	72° C	20 sec	35 repeats to 2
	5	72° C	5 min	
	6	12° C	Hold	