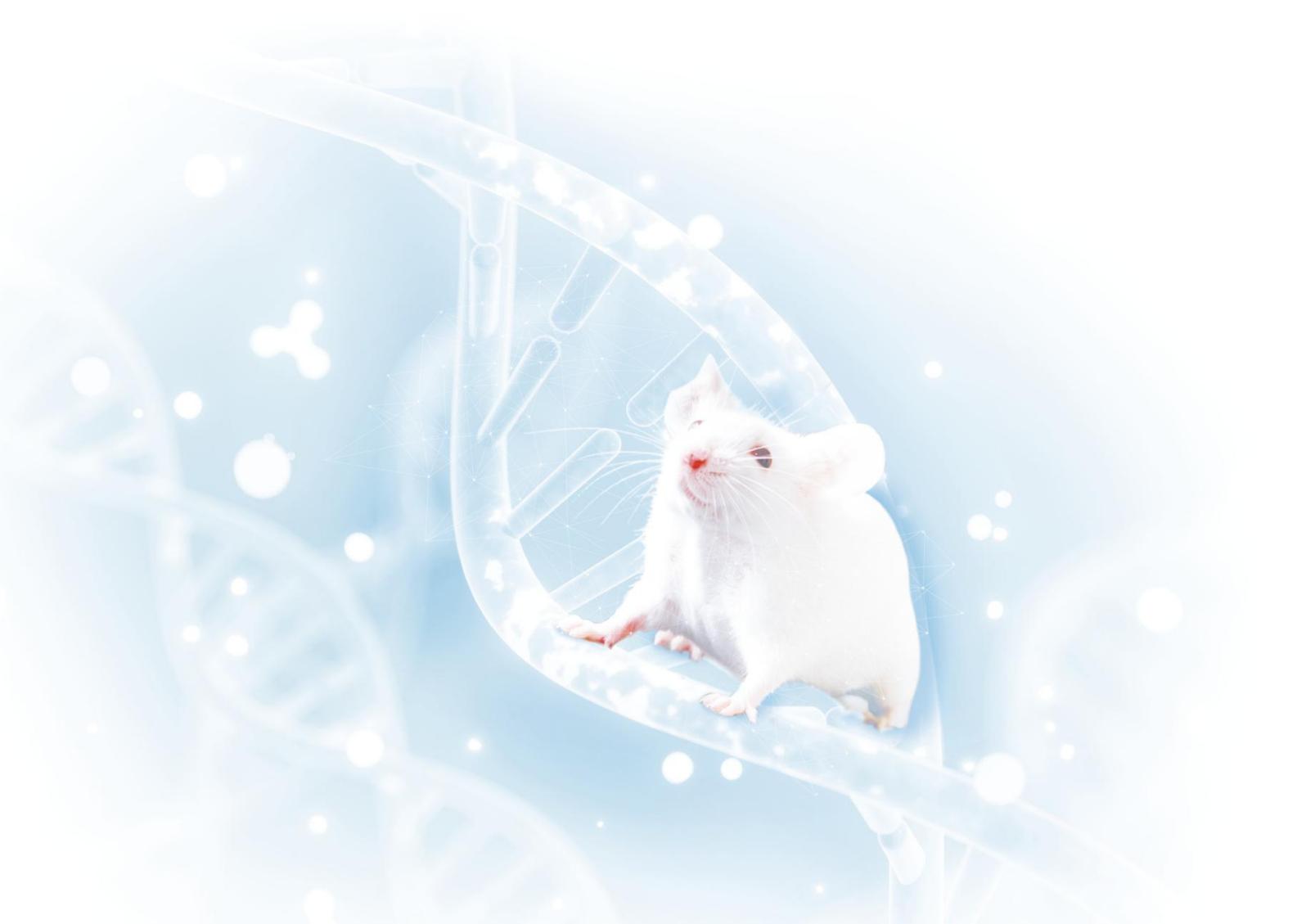


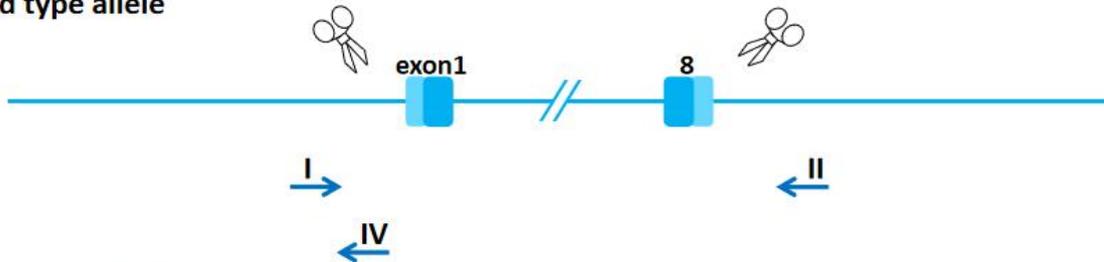
Ccdc74a-KO Genotyping Protocol



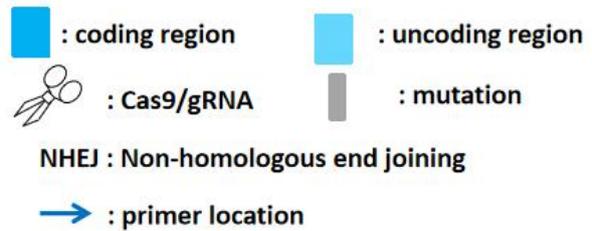
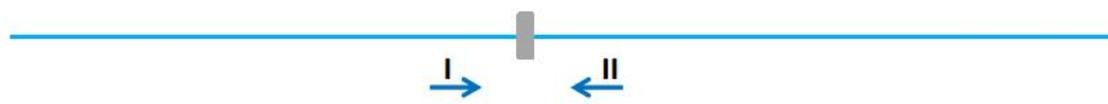
Common Name	Ccdc74a-K0	Cat. NO.	NM-K0-231498
Strain of Origin	C57BL/6J	Version	V1

Genotyping strategy

Wild type allele



knockout allele



Primers

Primer	Sequence (5' → 3')	Primer type
P1	GAAGATCCTGGGGTTCACGG	Forward
P2	TCCAGAAGCTATGGGGACA	Reverse
P4	CTCAGTACTGGCTGCTGGAG	Reverse

Expected results

Results	<p>P1P2P4</p> <p>HE WT M DL2000</p> <p>486 bp 288 bp</p> <p>bp 2000 1000 750 500 250 100</p> <p>1.7% agarose</p>
Genotype	<p>Knockout type: -4327bp</p> <p>Wild type: P1P4=288 bp</p> <p>Heterozygote: P1P2 =486 bp; P1P4=288 bp</p> <p>Homozygote: P1P2 =486 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 (μl)	
	ddH2O		7.5	
	2×Taq Plus Master Mix		10.0	
	P1 (10 pmol/μl)		0.5	
	P2 (10 pmol/μl)		0.5	
	P4 (10 pmol/μl)		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	
	4	72° C	20 sec	35 repeats to 2
	5	72° C	5 min	
6	12° C	Hold		