

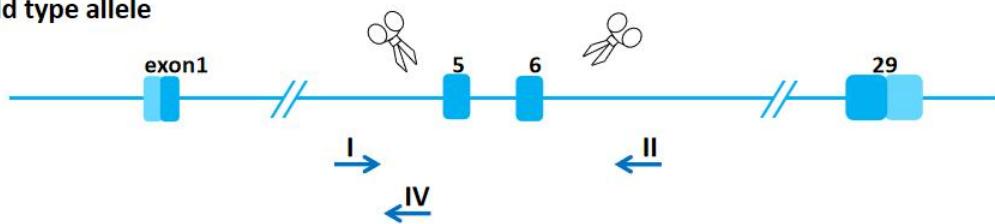
Apob-KO Genotyping Protocol



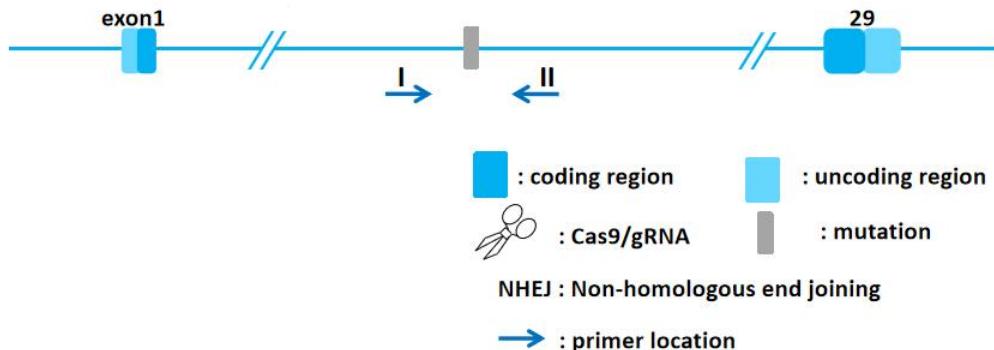
Common Name	Apob-KO	Cat. NO.	NM-KO-231454
Strain of Origin	C57BL/6J	Version	V1

Genotyping strategy

Wild type allele



knockout allele



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

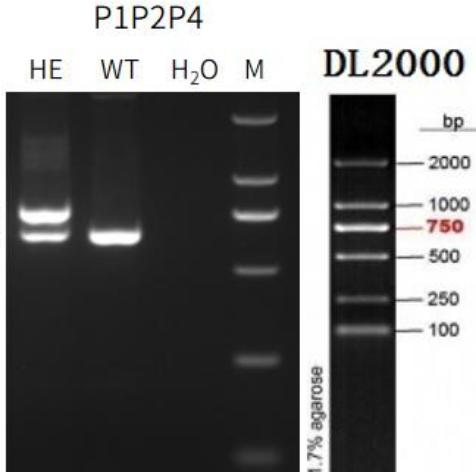
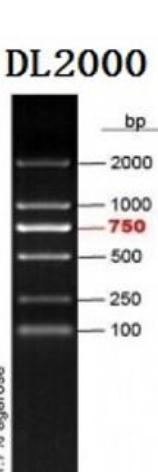
NHEJ : Non-homologous end joining

→ : primer location

Primers

Primer	Sequence (5' → 3')	Primer type
P1	GCTAGAGACACGAGCTTCGG	Forward
P2	AGGCAGGAAAAGATGCTGCT	Reverse
P4	GAAAAGCCATCCTTCCACTGAG	Reverse

Expected results

Results	P1P2P4  DL2000  1.7% agarose
Genotype Knockout type: -2283bp Wild type: P1P4=627 bp Heterozygote: P1P2 =746 bp; P1P4=627 bp Homozygote: P1P2 =746 bp	

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 K0 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
	1	95° C	5 min
	2	95° C	20 sec
	3	60° C	20 sec
	4	72° C	20 sec
	5	72° C	5 min
	6	12° C	Hold
			Note
			35 repeats to 2