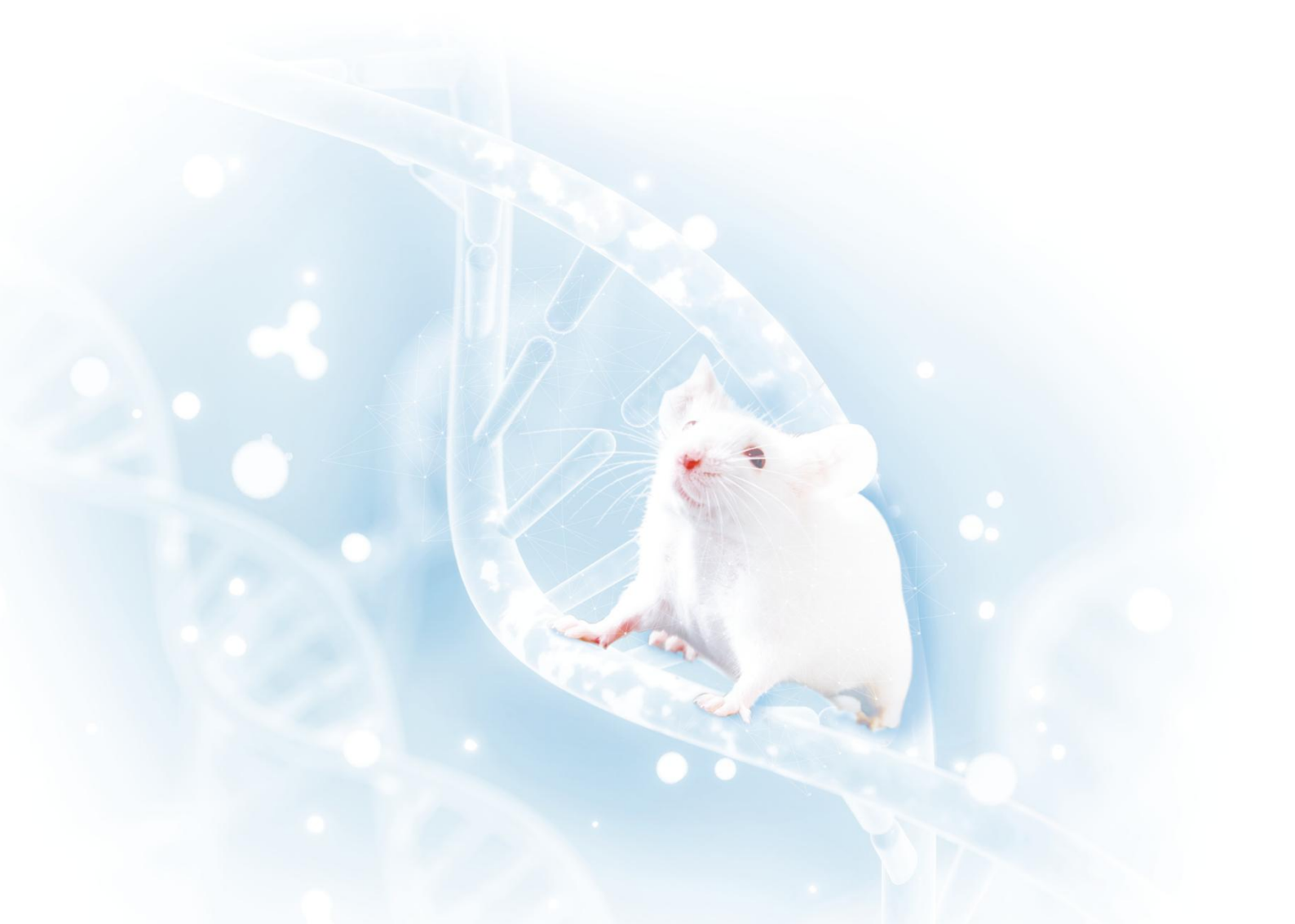
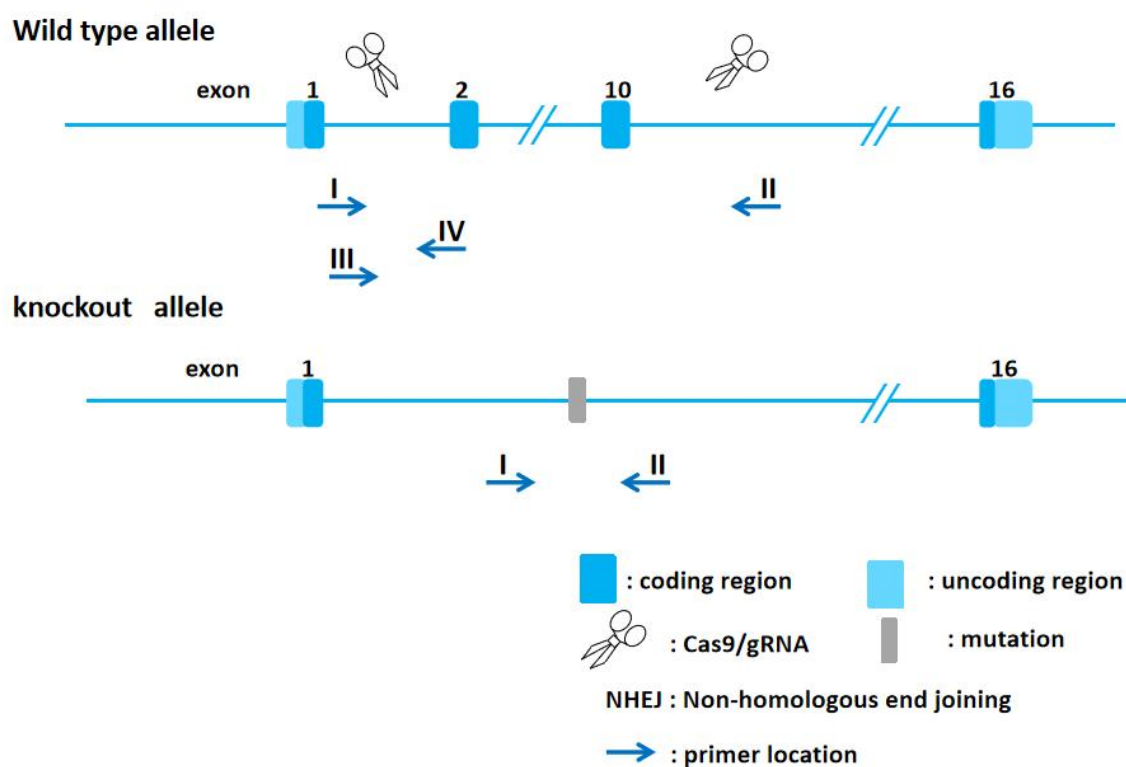


Tert-KO Genotyping Protocol



Common Name	Tert-KO	Cat. NO.	NM-KO-240173
Strain of Origin	C57BL/6J	Version	V1

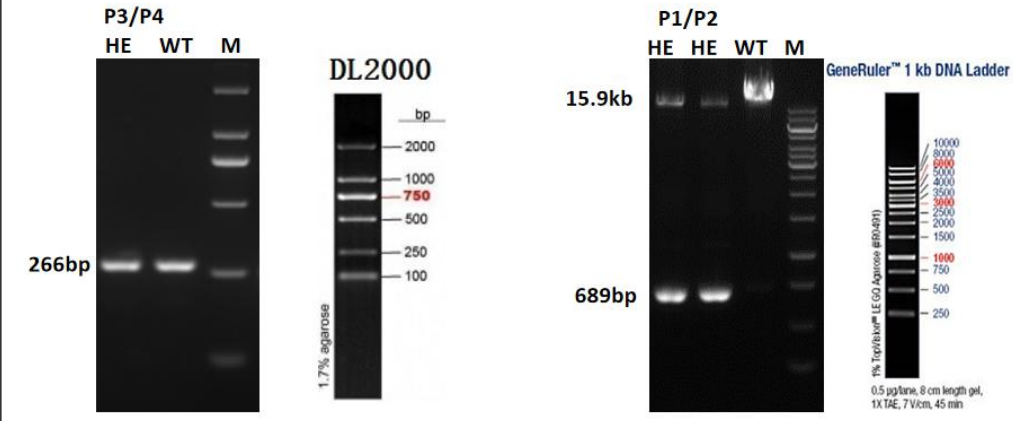
Genotyping strategy



Primers

Primer	Sequence (5' → 3')	Primer type
P1	CCTGGGTCCTGGCTGTTTTTC	Forward
P2	GCCTTGGCAAATAGCCCTTC	Reverse
P3	TTGGTTGCCCAATGCCTAGT	Forward
P4	AGCAGCTCAAAGCCAAAAGC	Reverse

Expected results

Results	 The figure displays two gel electrophoresis images. The left gel, labeled 'P3/P4', shows three lanes: HE, WT, and M. A single band is visible at 266bp in all three lanes. The right gel, labeled 'P1/P2', shows four lanes: HE, HE, WT, and M. A single band is visible at 689bp in all four lanes. Between the gels is a 'DL2000' ladder with markers at 2000, 1000, 750, 500, 250, and 100 bp. To the right of the P1/P2 gel is a 'GeneRuler™ 1 kb DNA Ladder' with markers from 1000 to 250 bp. The gels are run on 1.7% agarose.
Genotype	Knockout type: -15197 bp Wild type: P1P2 =15886 bp; P3P4 =266 bp Heterozygote: P1P2 =15886 bp and 689 bp; P3P4 =266 bp Homozygote: P1P2 =689 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	8.0
	2 × Rapid Taq Master Mix	10.0
	P1 (10 pmol/μl) or P3 (10 pmol/μl)	0.5

	P2 (10 pmol/ μ l) or P4 (10 pmol/ μ l)			0.5
	Genomic DNA			1.0
	Total			20
	2 $\times$ Rapid Taq Master Mix from Vazyme (Code Number: P222-01)			
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	