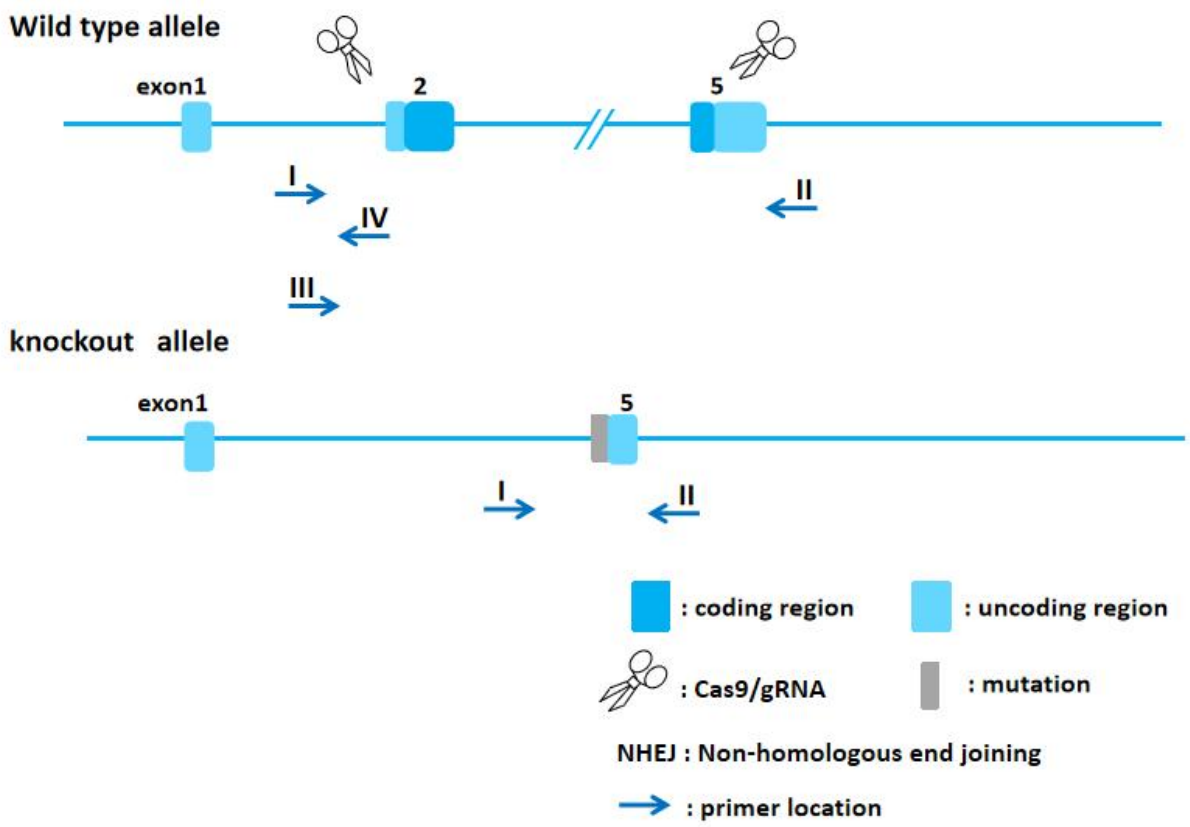
SHANGHAI MODEL ORGANISMS

Editing Genes, Decoding the Mystery of Life

Bik-KO Genotyping Protocol

Common Name	Bik-KO	Cat. NO.	NM-KO-241467
Strain of Origin	C57BL/6J	Version	V1

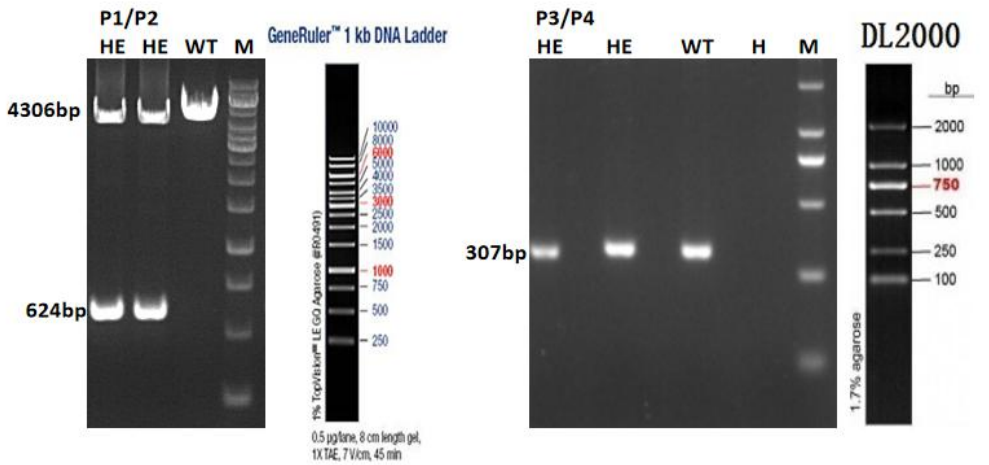
Genotyping strategy



Primers

Primer	Sequence (5'→3')	Primer type
P1	GTTCCTCGGCAAGAGTGGTA	Forward
P2	GACAGGCAGAAAGGGACAGT	Reverse
P3	GGTTCCAGGCATGTAGTGCT	Forward
P4	GGCCACCAAGCTTCAACAAG	Reverse

Expected results

Results	
Genotype	Knockout type：-3682bp Wild type：P1P2 =4306 bp；P3P4 =307 bp Heterozygote：P1P2 =4306 bp and 624 bp；P3P4 =307 bp Homozygote：P1P2 =624 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 KO 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/μl) or P4(10 pmol/μl)			0.5
	Genomic DNA			1.0
	Total			20
	2×Rapid Taq Master Mix from Vazyme(Code Number: P222-01)			
Cycling Reaction	Step	Temp	Time	Note
	1	95℃	5 min	
	2	95℃	20 sec	
	3	60℃	20 sec	
	4	72℃	20 sec	35 repeats to 2
	5	72℃	5 min	
	6	12℃	Hold	