

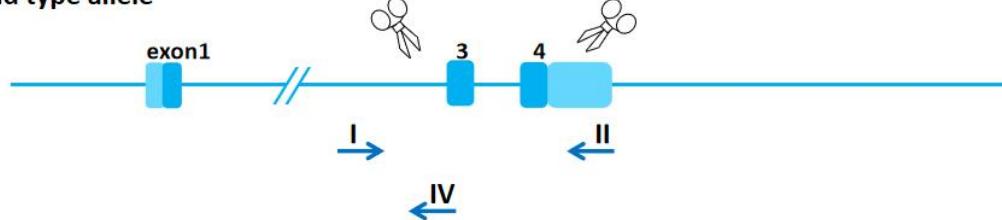
Tm2d2-KO Genotyping Protocol



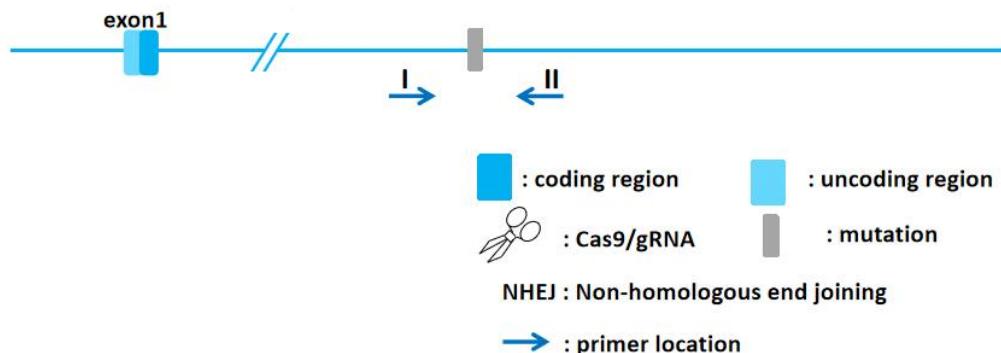
Common Name	Tm2d2-KO	Cat. NO.	NM-KO-233925
Strain of Origin	C57BL/6J	Version	V1

Genotyping strategy

Wild type allele



knockout allele



Primers

Primer	Sequence (5' → 3')	Primer type
P1	TGGGGTAGACTACGCAAACC	Forward
P2	AAGAGCCAGCCACACAGAAA	Reverse
P4	TGCACATCACTGTACGCCCTGAC	Reverse

Expected results

Results	 <p>P1P2P4</p> <p>HE HE WT H₂O M</p> <p>591 bp</p> <p>447 bp</p> <p>DL2000</p> <p>bp</p> <p>2000</p> <p>1000</p> <p>750</p> <p>500</p> <p>250</p> <p>100</p> <p>1.7% agarose</p>
	<p>Knockout type: -2443bp</p> <p>Wild type: P1P4=447 bp</p> <p>Heterozygote: P1P2 =591 bp; P1P4=447 bp</p> <p>Homozygote: P1P2 =591 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 (μ l)	
	ddH ₂ O		7.5	
	2 \times Taq Plus Master Mix		10.0	
	P1(10 pmol/ μ l)		0.5	
	P2(10 pmol/ μ l)		0.5	
	P4(10 pmol/ μ 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	