

hAPOE4

Nomenclature	C57BL/6Smoc- <i>ApoE</i> ^{tm2(hAPOE4)Smoc}
Cat. NO.	NM-HU-190002
Strain State	Repository Live

Gene Summary

Gene Symbol ApoE	Synonyms	Apo-E; AI255918
	NCBI ID	11816
	MGI ID	88057
	Ensembl ID	ENSMUSG00000002985
	Human Ortholog	APOE

Model Description

This APOE4 humanized mouse model was established by replacing the mouse *ApoE* gene coding exons and introns with the human APOE4 corresponding sequence by homologous recombination.

Research Application: Cardiovascular disease

*Literature published using this strain should indicate: hAPOE4 mice (Cat. NO. NM-HU-190002) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

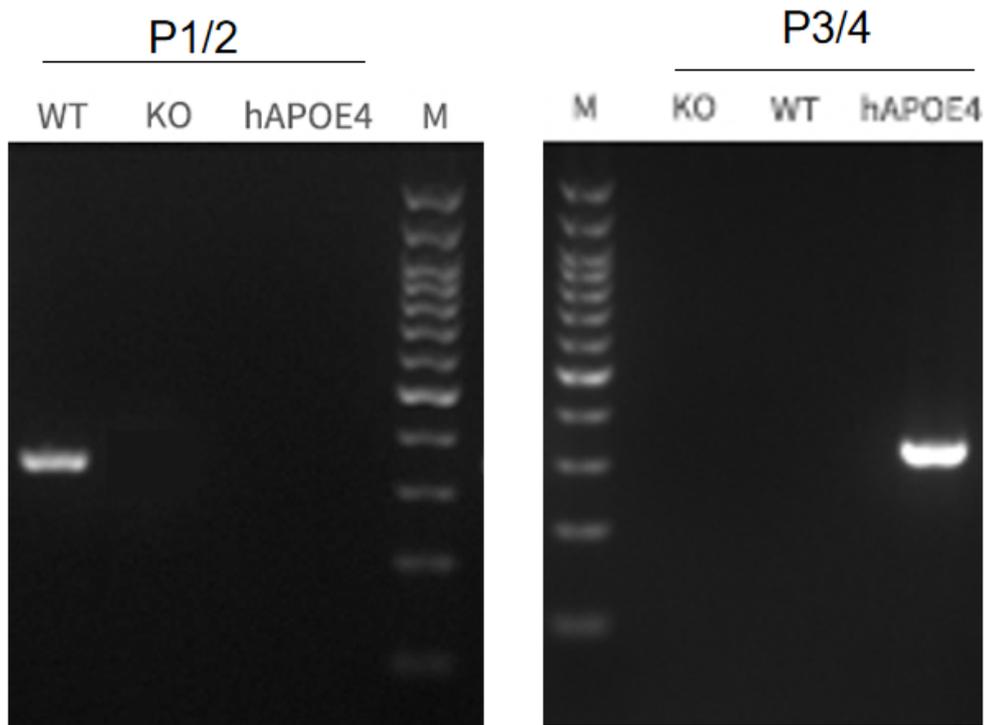


Fig1. Genotyping of WT 、 KO & Humanized mice by PCR.

Primer P1/2 Wild type = 342 bp

Primer P3/4 mutant = 332 bp

M: 100bp Plus DNA ladder.

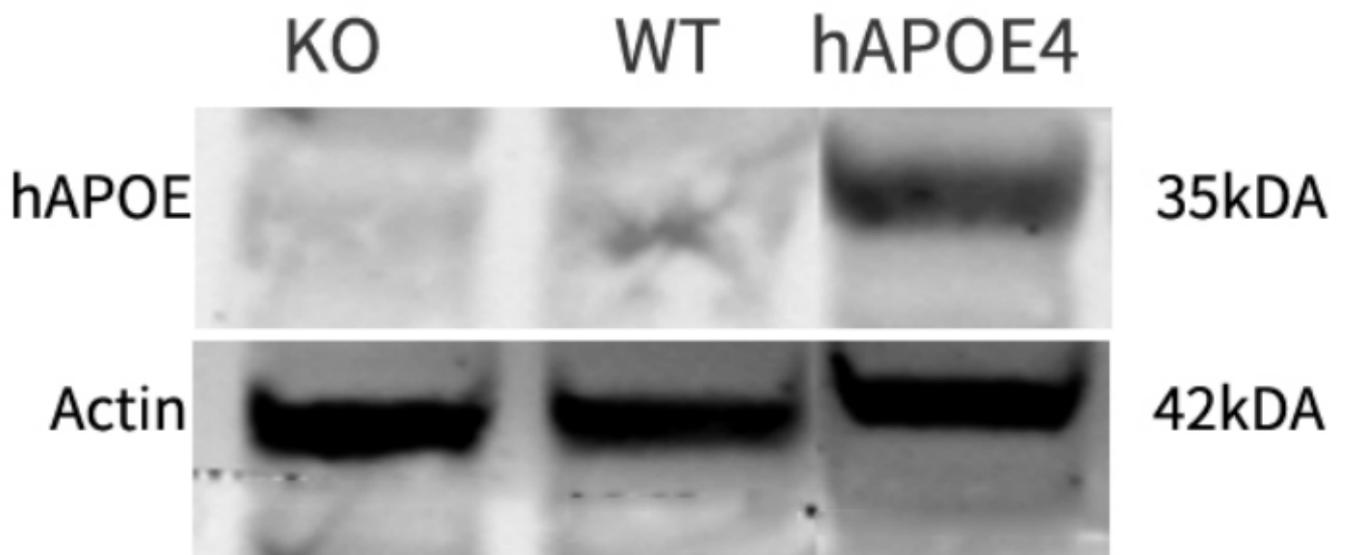


Fig2. Western blot analysis of APOE4 protein expression of WT C57, Apoe-KO and APOE4 humanized mice.

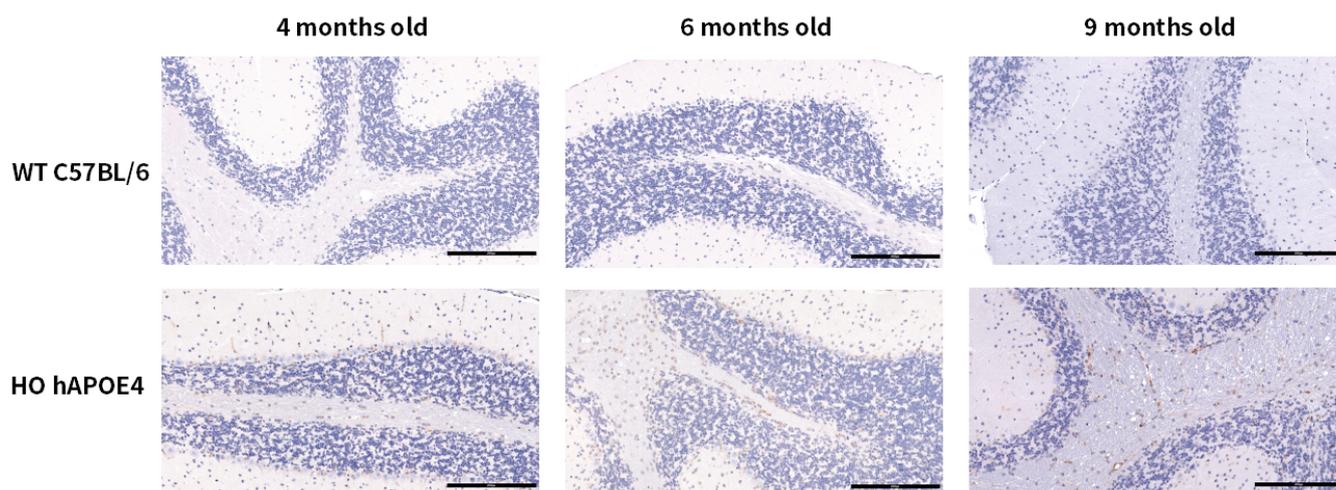


Fig3. Detection of human APOE4 expression in brain in hAPOE4 knockin mice by IHC.

Brain were collected from wild-type mice and HO hAPOE4 mice, and analyzed by IHC with anti-human APOE4 antibody.

Abbr. HO, homozygous; WT, wild type.

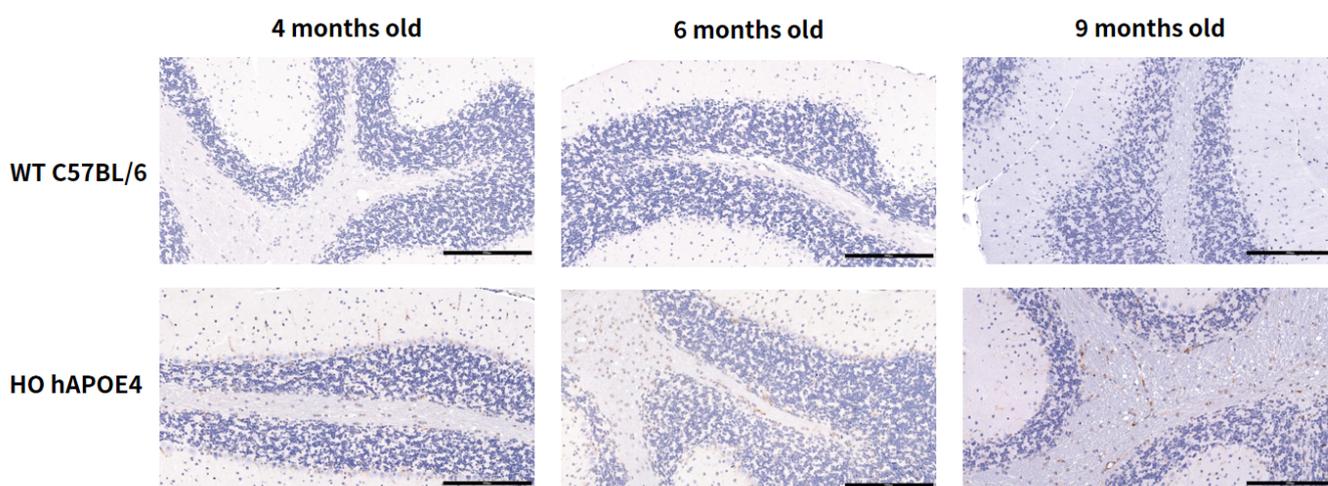


Fig4. Detection of human APOE4 expression in Cerebellum in hAPOE4 knockin mice by IHC.

Brain were collected from wild-type mice and HO hAPOE4 mice, and analyzed by IHC with anti-human APOE4 antibody.

Abbr. HO, homozygous; WT, wild type.

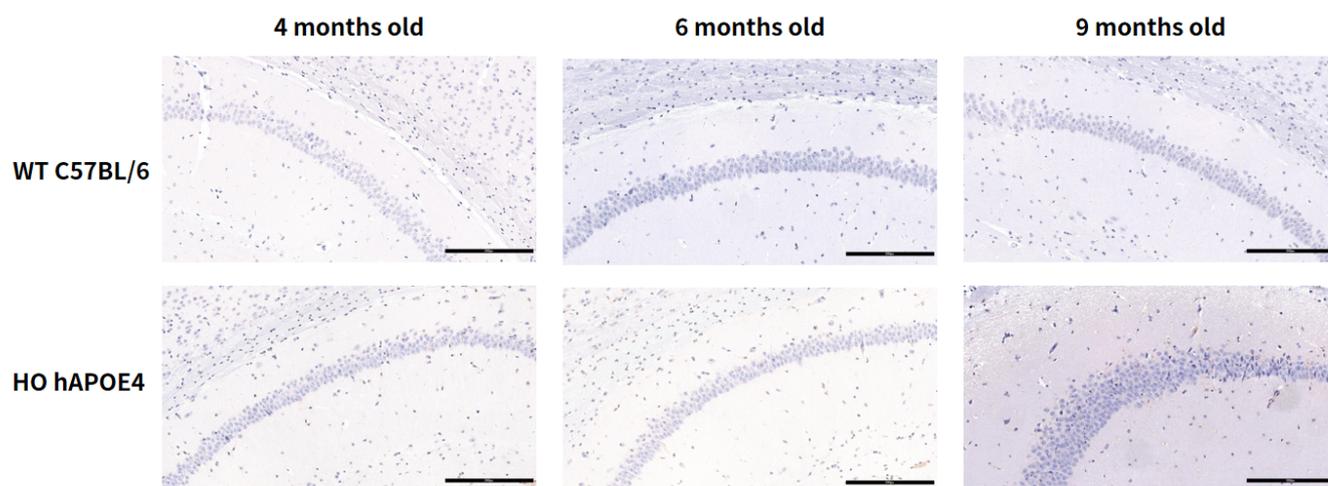


Fig5. Detection of human APOE4 expression in Cornu ammonis 1(CA1) in hAPOE4 knockin mice by IHC.

Brain were collected from wild-type mice and HO hAPOE4 mice, and analyzed by IHC with anti-human APOE4 antibody.

Abbr. HO, homozygous; WT, wild type.

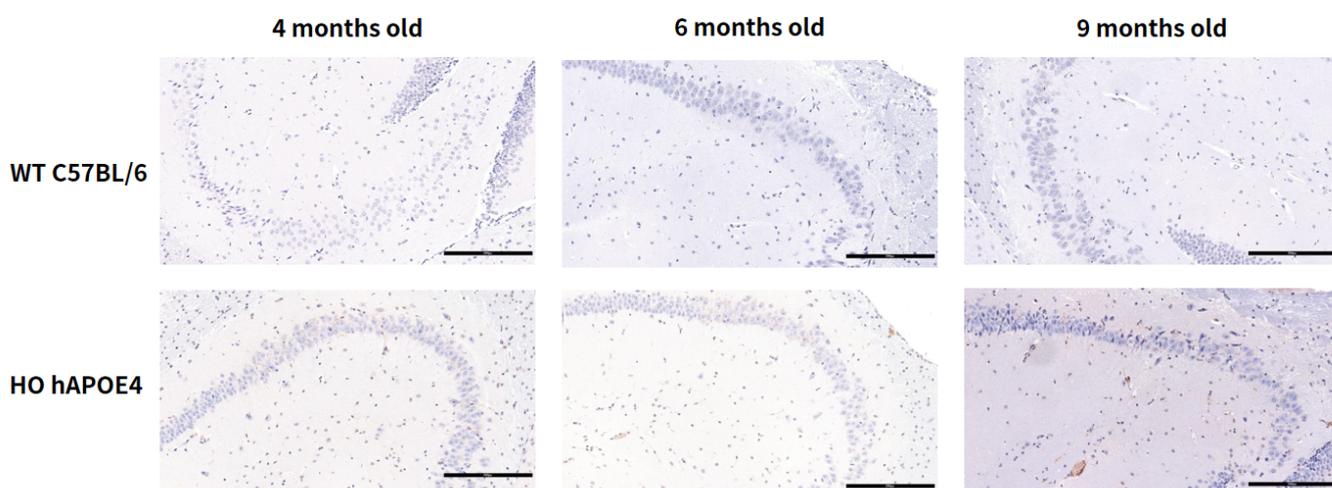


Fig6. Detection of human APOE4 expression in Cornu ammonis 3(CA3) in hAPOE4 knockin mice by IHC.

Brain were collected from wild-type mice and HO hAPOE4 mice, and analyzed by IHC with anti-human APOE4 antibody.

Abbr. HO, homozygous; WT, wild type.

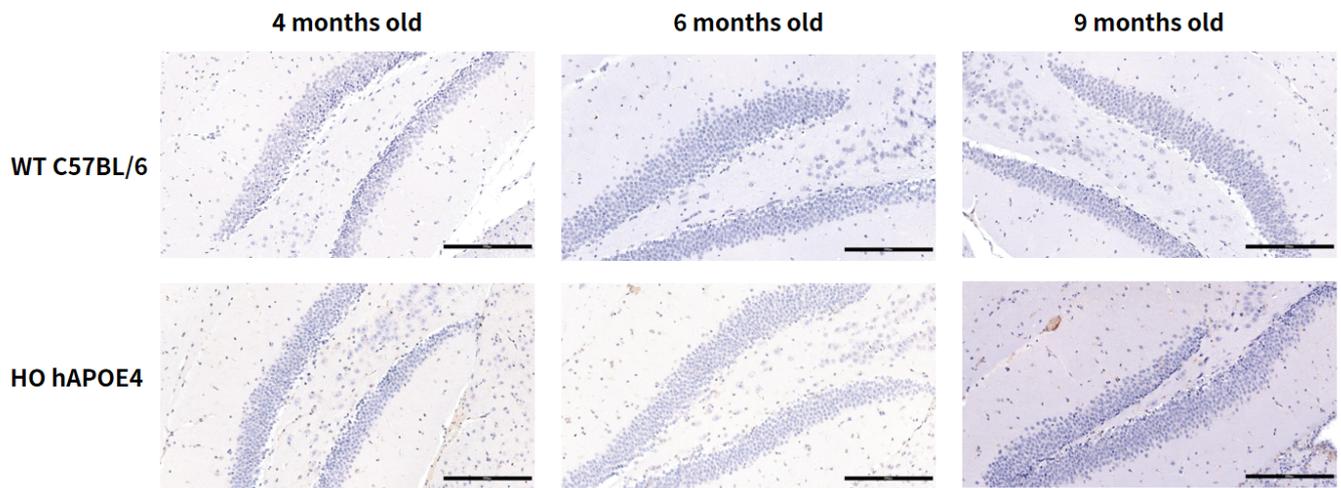


Fig7. Detection of human APOE4 expression in Dentate Gyrus(DG) in hAPOE4 knockin mice by IHC.

Brain were collected from wild-type mice and HO hAPOE4 mice, and analyzed by IHC with anti-human APOE4 antibody.

Abbr. HO, homozygous; WT, wild type.