

App-KO

Nomenclature	C57BL/6Smoc- <i>App</i> ^{em1Smoc}
Cat. NO.	NM-KO-190444
Strain State	Sperm cryopreservation

Gene Summary

Gene Symbol App	Synonyms	Ag, Abpp, Adap, Cvap, Abeta, betaApp, E030013M08Rik
	NCBI ID	11820
	MGI ID	88059
	Ensembl ID	ENSMUSG00000022892
	Human Ortholog	APP

Model Description

exon 3 of App gene was deleted to generate App knockout mice.

Research Application: neuronal differentiation/migration, synaptic regulation and Alzheimer's disease related

*Literature published using this strain should indicate: App-KO mice (Cat. NO. NM-KO-190444) were purchased from Shanghai Model Organisms Center, Inc..

Disease Connection

Alzheimer's Disease	Phenotype(s)	MGI:4847595 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Psen1-KO(NM-KO-202110) mice.
	Reference(s)	Guo Q, Zheng H, Justice NJ, Central CRF system perturbation in an Alzheimer's disease knockin mouse model. Neurobiol Aging. 2012 Nov;33(11):2678-91

Niemann-Pick Disease	Phenotype(s)	MGI:5305067 Note: The expected phenotype(s) may be observed in the above-mentioned mice that bred with Npc1-KO(NM-KO-205053) mice.
	Reference(s)	Nunes A, Pressey SN, Cooper JD, Soriano S, Loss of amyloid precursor protein in a mouse model of Niemann-Pick type C disease exacerbates its phenotype and disrupts tau homeostasis. <i>Neurobiol Dis.</i> 2011 Jun;42(3):349-59
Alzheimer's Disease	Phenotype(s)	MGI:2174917
	Reference(s)	Dawson GR, Seabrook GR, Zheng H, Smith DW, Graham S, O'Dowd G, Bowery BJ, Boyce S, Trumbauer ME, Chen HY, Van der Ploeg LH, Sirinathsinghji DJ, Age-related cognitive deficits, impaired long-term potentiation and reduction in synaptic marker density in mice lacking the beta-amyloid precursor protein. <i>Neuroscience.</i> 1999 Apr;90(1):1-13

Validation Data

No data