

Resource Summary Report

Generated by PRECISE-TBI on Aug 1, 2026

B6.129S7-App^{tm1Dbo}/J

RRID:IMSR_JAX:004133

Type: Organism

Proper Citation

RRID:IMSR_JAX:004133

Organism Information

URL: <https://www.jax.org/strain/004133>

Proper Citation: RRID:IMSR_JAX:004133

Description: Mus musculus with name B6.129S7-App^{tm1Dbo}/J from IMSR.

Species: Mus musculus

Notes: gene symbol note: amyloid beta precursor protein; mutant strain|congenic strain: App

Affected Gene: amyloid beta precursor protein

Genomic Alteration: targeted mutation 1; David R Borchelt

Catalog Number: JAX:004133

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.129S7-App^{tm1Dbo}/J

Record Creation Time: 20250513T053643+0000

Record Last Update: 20260801T050346+0000

Ratings and Alerts

No rating or validation information has been found for B6.129S7-App^{tm1Dbo}/J.

No alerts have been found for B6.129S7-App^{tm1Dbo}/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 17 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#).

Lee HJ, et al. (2023) Reelin and APP Cooperatively Modulate Dendritic Spine Formation In Vitro and In Vivo. *Experimental neurobiology*, 32(1), 42.

Cannavo C, et al. (2022) Endosomal structure and APP biology are not altered in a preclinical mouse cellular model of Down syndrome. *PloS one*, 17(5), e0262558.

Owen JE, et al. (2021) Late-in-life neurodegeneration after chronic sleep loss in young adult mice. *Sleep*, 44(8).

Roos TT, et al. (2021) Neuronal spreading and plaque induction of intracellular A β and its disruption of A β homeostasis. *Acta neuropathologica*, 142(4), 669.

Zhang X, et al. (2021) Heparanase overexpression impedes perivascular clearance of amyloid- β from murine brain: relevance to Alzheimer's disease. *Acta neuropathologica communications*, 9(1), 84.

Gulisano W, et al. (2019) Neuromodulatory Action of Picomolar Extracellular A β ₄₂ Oligomers on Presynaptic and Postsynaptic Mechanisms Underlying Synaptic Function and Memory. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 39(30), 5986.

Stern AL, et al. (2018) BACE1 Mediates HIV-Associated and Excitotoxic Neuronal Damage Through an APP-Dependent Mechanism. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 38(18), 4288.

Doshina A, et al. (2017) Cortical cells reveal APP as a new player in the regulation of GABAergic neurotransmission. *Scientific reports*, 7(1), 370.

Puzzo D, et al. (2017) LTP and memory impairment caused by extracellular A β and Tau oligomers is APP-dependent. *eLife*, 6.

Steffen J, et al. (2017) Expression of endogenous mouse APP modulates β -amyloid deposition in hAPP-transgenic mice. *Acta neuropathologica communications*, 5(1), 49.

Temkin P, et al. (2017) The Retromer Supports AMPA Receptor Trafficking During LTP. *Neuron*, 94(1), 74.

Piacentini R, et al. (2015) Herpes Simplex Virus type-1 infection induces synaptic dysfunction in cultured cortical neurons via GSK-3 activation and intraneuronal amyloid- β

protein accumulation. Scientific reports, 5, 15444.

Giuffrida ML, et al. (2015) Monomeric β -amyloid interacts with type-1 insulin-like growth factor receptors to provide energy supply to neurons. Frontiers in cellular neuroscience, 9, 297.

Frick A, et al. (2015) Identifying genes that mediate anthracycline toxicity in immune cells. Frontiers in pharmacology, 6, 62.

Sosa LJ, et al. (2013) Amyloid precursor protein is an autonomous growth cone adhesion molecule engaged in contact guidance. PloS one, 8(5), e64521.

Koike MA, et al. (2012) APP knockout mice experience acute mortality as the result of ischemia. PloS one, 7(8), e42665.

Abisambra JF, et al. (2010) LDLR expression and localization are altered in mouse and human cell culture models of Alzheimer's disease. PloS one, 5(1), e8556.