

Resource Summary Report

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STOCK Tg(Camk2a-tTA)1Mmay Fgf14Tg(tetO-MAPT*P301L)4510Kha/J

RRID:IMSR_JAX:024854

Type: Organism

Proper Citation

RRID:IMSR_JAX:024854

Organism Information

URL: <https://www.jax.org/strain/024854>

Proper Citation: RRID:IMSR_JAX:024854

Description: Mus musculus with name STOCK Tg(Camk2a-tTA)1Mmay Fgf14^{Tg(tetO-MAPT*P301L)4510Kha/J} from IMSR.

Species: Mus musculus

Synonyms: STOCK Tg(Camk2a-tTA)1Mmay Tg(tetO-MAPT*P301L)#Kha/J. STOCK Tg(Camk2a-tTA)1Mmay Tg(tetO-MAPT*P301L)4510Kha/J. rTg4510

Notes: gene symbol note: tetracycline-controlled transactivator|fibroblast growth factor 14|calcium/calmodulin-dependent protein kinase II alpha|tet operator|microtubule associated protein tau|transgene insertion 1; Mark Mayford; mutant stock: tTA|Fgf14|Camk2a|tetO|MAPT|Tg(Camk2a-tTA)1Mmay

Affected Gene: tetracycline-controlled transactivator|fibroblast growth factor 14|calcium/calmodulin-dependent protein kinase II alpha|tet operator|microtubule associated protein tau|transgene insertion 1; Mark Mayford

Genomic Alteration: transgene insertion 1; Mark Mayford|transgene insertion 4510; Karen Hsiao Ashe

Catalog Number: JAX:024854

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: STOCK Tg(Camk2a-tTA)1Mmay Fgf14^{Tg(tetO-MAPT*P301L)4510Kha/J}

Record Creation Time: 20250513T053752+0000

Record Last Update: 20260829T045056+0000

Ratings and Alerts

No rating or validation information has been found for STOCK Tg(Camk2a-tTA)1Mmay Fgf14^{Tg(tetO-MAPT*P301L)4510Kha/J}.

No alerts have been found for STOCK Tg(Camk2a-tTA)1Mmay Fgf14^{Tg(tetO-MAPT*P301L)4510Kha/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 28 mentions in open access literature.

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

Tang S, et al. (2026) Hippocampus-targeted BDNF gene therapy to rescue cognitive impairments of Alzheimer's disease in multiple mouse models. *Genes & diseases*, 13(2), 101649.

Moretto E, et al. (2026) Aberrant tau accumulation caused by MAPT mutations induces early pathological changes in axonal transport that are rescued by p38 γ inhibition. *Nature neuroscience*, 29(6), 1355.

Hou SS, et al. (2025) Shallow-angle intracranial cannula for repeated infusion and in vivo imaging with multiphoton microscopy. *Neurophotonics*, 12(2), 025001.

Hulse JP, et al. (2025) pS396/pS404 (PHF1) tau vaccine outperforms pS199/pS202 (AT8) in rTg4510 tauopathy model. *NPJ vaccines*, 10(1), 94.

Volbracht C, et al. (2025) Deubiquitinating Enzymes Ubiquitin-Specific Proteases 7 and 10 Regulate TAU Aggregation. *International journal of molecular sciences*, 26(22).

Liu X, et al. (2025) Modulation of Peripheral Mast Cell and Brain Microglia Axis via Kinase Inhibition. *Metabolites*, 15(3).

Liang H, et al. (2025) Probing tau citrullination in Alzheimer's disease brains and mouse models of tauopathy. *Acta neuropathologica*, 150(1), 61.

Liu Y, et al. (2025) Abnormal behaviors and glial responses in an animal model of tau pathology. *Molecular brain*, 18(1), 83.

Castillo-Negrete R, et al. (2025) A novel TGF β 1-Hs3st2-tau axis regulates tau pathology and synaptic integrity. *Frontiers in neuroscience*, 19, 1726022.

Souza Matos M, et al. (2025) Effects of age and dietary methionine restriction on cognitive and behavioural phenotypes in the rTg4510 mouse model of frontotemporal dementia. *Neurobiology of aging*, 146, 24.

Kong Y, et al. (2024) Increased Cerebral Level of P2X7R in a Tauopathy Mouse Model by PET Using [18F]GSK1482160. *ACS chemical neuroscience*, 15(11), 2112.

Watzlawik JO, et al. (2024) Development and characterization of phospho-ubiquitin antibodies to monitor PINK1-PRKN signaling in cells and tissue. *bioRxiv : the preprint server for biology*.

Soeda Y, et al. (2024) A novel monoclonal antibody generated by immunization with granular tau oligomers binds to tau aggregates at 423-430 amino acid sequence. *Scientific reports*, 14(1), 16391.

Hulse J, et al. (2024) Virus-like particle (VLP)-based vaccine targeting tau phosphorylated at Ser396/Ser404 (PHF1) site outperforms phosphorylated S199/S202 (AT8) site in reducing tau pathology and restoring cognitive deficits in the rTg4510 mouse model of tauopathy. *Research square*.

Wahl D, et al. (2024) The reverse transcriptase inhibitor 3TC modulates hippocampal transcriptome signatures of inflammation in tauopathy model mice. *Experimental gerontology*, 192, 112458.

Saghafi S, et al. (2024) Inferring Parameters of Pyramidal Neuron Excitability in Mouse Models of Alzheimer's Disease Using Biophysical Modeling and Deep Learning. *Bulletin of mathematical biology*, 86(5), 46.

Ellis MJ, et al. (2024) Identification of high-performing antibodies for the reliable detection of Tau proteoforms by Western blotting and immunohistochemistry. *Acta neuropathologica*, 147(1), 87.

Watzlawik JO, et al. (2024) Development and characterization of phospho-ubiquitin antibodies to monitor PINK1-PRKN signaling in cells and tissue. *Autophagy*, 20(9), 2076.

Jackson M, et al. (2024) The Chronic Effects of a Single Low-Intensity Blast Exposure on Phosphoproteome Networks and Cognitive Function Influenced by Mutant Tau Overexpression. *International journal of molecular sciences*, 25(6).

Zwang TJ, et al. (2024) Neurofibrillary tangle-bearing neurons have reduced risk of cell death in mice with Alzheimer's pathology. *Cell reports*, 43(8), 114574.