

Resource Summary Report

Generated by ASWG on Aug 10, 2026

B6.Cg-Tg(Thy1-COP4/EYFP)18Gfng/J

RRID:IMSR_JAX:007612

Type: Organism

Proper Citation

RRID:IMSR_JAX:007612

Organism Information

URL: <https://www.jax.org/strain/007612>

Proper Citation: RRID:IMSR_JAX:007612

Description: Mus musculus with name B6.Cg-Tg(Thy1-COP4/EYFP)18Gfng/J from IMSR.

Species: Mus musculus

Synonyms: B6.Cg-Tg(Thy1-ChR2/EYFP)18Gfng/J

Notes: gene symbol note: thymus cell antigen 1; theta|Channelrhodopsin||transgene insertion 18; Guoping Feng; mutant strain: Thy1|COP4||Tg(Thy1-COP4/EYFP)18Gfng

Affected Gene: thymus cell antigen 1; theta|Channelrhodopsin||transgene insertion 18; Guoping Feng

Genomic Alteration: transgene insertion 18; Guoping Feng

Catalog Number: JAX:007612

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6.Cg-Tg(Thy1-COP4/EYFP)18Gfng/J

Record Creation Time: 20250513T053702+0000

Record Last Update: 20260808T050907+0000

Ratings and Alerts

No rating or validation information has been found for B6.Cg-Tg(Thy1-COP4/EYFP)18Gfng/J.

No alerts have been found for B6.Cg-Tg(Thy1-COP4/EYFP)18Gfng/J.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 46 mentions in open access literature.

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

Chen Y, et al. (2026) On-demand seizures facilitate rapid screening of therapeutics for epilepsy. eLife, 13.

Kim CY, et al. (2026) Protocol to design and implement scalable wireless network system for high-throughput, automated behavioral and circuit neuroscience in mice. STAR protocols, 7(2), 104453.

Yu H, et al. (2025) Construction of a rodent neural network-skeletal muscle assembloid that simulate the postnatal development of spinal cord motor neuronal network. Scientific reports, 15(1), 3635.

Yang S, et al. (2025) Neural network tissue and myocytes co-culture system reveals effects of different myocytes on postnatal development of spinal cord neural network. Cellular and molecular life sciences : CMLS, 82(1), 378.

Beau M, et al. (2025) A deep learning strategy to identify cell types across species from high-density extracellular recordings. Cell, 188(8), 2218.

Dadgar-Kiani E, et al. (2024) Neuromodulation modifies α -synuclein spreading dynamics in vivo and the pattern is predicted by changes in whole-brain function. Brain stimulation, 17(4), 938.

Zhai S, et al. (2024) Ca²⁺-dependent phosphodiesterase 1 regulates the plasticity of striatal spiny projection neuron glutamatergic synapses. Cell reports, 43(8), 114540.

Vaissiere T, et al. (2024) Syngap1 Promotes Cognitive Function through Regulation of Cortical Sensorimotor Dynamics. bioRxiv : the preprint server for biology.

Dell'Orco M, et al. (2023) Repetitive Spreading Depolarization induces the activation of cell differentiation, synaptic plasticity and neuroprotective pathways. bioRxiv : the preprint server for biology.

- Broersen R, et al. (2023) Synaptic mechanisms for associative learning in the cerebellar nuclei. *Nature communications*, 14(1), 7459.
- Hádinger N, et al. (2023) Region-selective control of the thalamic reticular nucleus via cortical layer 5 pyramidal cells. *Nature neuroscience*, 26(1), 116.
- Dell'Orco M, et al. (2023) Repetitive spreading depolarization induces gene expression changes related to synaptic plasticity and neuroprotective pathways. *Frontiers in cellular neuroscience*, 17, 1292661.
- Matityahu L, et al. (2022) A tonic nicotinic brake controls spike timing in striatal spiny projection neurons. *eLife*, 11.
- Oz O, et al. (2022) Non-uniform distribution of dendritic nonlinearities differentially engages thalamostriatal and corticostriatal inputs onto cholinergic interneurons. *eLife*, 11.
- Mesquida-Veny F, et al. (2022) Nociception-Dependent CCL21 Induces Dorsal Root Ganglia Axonal Growth via CCR7-ERK Activation. *Frontiers in immunology*, 13, 880647.
- Mesquida-Veny F, et al. (2022) Genetic control of neuronal activity enhances axonal growth only on permissive substrates. *Molecular medicine (Cambridge, Mass.)*, 28(1), 97.
- Luis-Islas J, et al. (2022) Optoception: Perception of Optogenetic Brain Perturbations. *eNeuro*, 9(3).
- Wang GH, et al. (2022) Pre-synaptic and post-synaptic A-type K⁺ channels regulate glutamatergic transmission and switching of the network into epileptiform oscillations. *British journal of pharmacology*, 179(14), 3754.
- Hwang FJ, et al. (2022) Motor learning selectively strengthens cortical and striatal synapses of motor engram neurons. *Neuron*, 110(17), 2790.
- Laricchiuta D, et al. (2021) Optogenetic Stimulation of Prelimbic Pyramidal Neurons Maintains Fear Memories and Modulates Amygdala Pyramidal Neuron Transcriptome. *International journal of molecular sciences*, 22(2).