

Resource Summary Report

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

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

Genomic Alteration: transgene insertion 18; Guoping Feng

Catalog Number: JAX:007612

Database: International Mouse Resource Center IMSR, JAX

Database Abbreviation: IMSR

Availability: live

Alternate IDs: IMSR_JAX:7612

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

Record Creation Time: 20230509T193254+0000

Record Last Update: 20250412T090426+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: International Mouse Resource Center IMSR, JAX

Usage and Citation Metrics

We found 42 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

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) Ca^{2+} -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).

Gao M, et al. (2021) Visual Familiarity Induced 5-Hz Oscillations and Improved Orientation and Direction Selectivities in V1. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 41(12), 2656.

Tang Y, et al. (2021) Restoration of Visual Function and Cortical Connectivity After Ischemic Injury Through NeuroD1-Mediated Gene Therapy. *Frontiers in cell and developmental biology*, 9, 720078.

Tamim I, et al. (2021) Spreading depression as an innate antiseizure mechanism. *Nature communications*, 12(1), 2206.

Huang CS, et al. (2021) Conveyance of cortical pacing for parkinsonian tremor-like hyperkinetic behavior by subthalamic dysrhythmia. *Cell reports*, 35(3), 109007.

Benthall KN, et al. (2021) Loss of Tsc1 from striatal direct pathway neurons impairs endocannabinoid-LTD and enhances motor routine learning. *Cell reports*, 36(6), 109511.