

Resource Summary Report

Generated by [RRID](#) on Aug 19, 2026

pAAV-hSyn1-mRuby2-GSG-P2A-GCaMP6s-WPRE-pA

RRID:Addgene_50942

Type: Plasmid

Proper Citation

RRID:Addgene_50942

Plasmid Information

URL: <http://www.addgene.org/50942>

Proper Citation: RRID:Addgene_50942

Insert Name: mRuby2-P2A-GCaMP6s

Organism: Rattus norvegicus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:27284193](#)

Vector Backbone Description: Vector Backbone:pAAV; Vector Types:AAV; Bacterial Resistance:Ampicillin

Comments: The discrepancies between the full sequence and Addgene's QC sequence should not have any functional consequence.

Plasmid Name: pAAV-hSyn1-mRuby2-GSG-P2A-GCaMP6s-WPRE-pA

Record Creation Time: 20220422T222301+0000

Record Last Update: 20260815T081610+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-hSyn1-mRuby2-GSG-P2A-GCaMP6s-WPRE-pA.

No alerts have been found for pAAV-hSyn1-mRuby2-GSG-P2A-GCaMP6s-WPRE-pA.

Data and Source Information

Usage and Citation Metrics

We found 17 mentions in open access literature.

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

McNally MA, et al. (2025) Ongoing loss of viable neurons for weeks after mild hypoxia-ischaemia. *Brain communications*, 7(2), fcaf153.

Williams LE, et al. (2025) Repetitive Sensory Stimulation Potentiates and Recruits Sensory-Evoked Cortical Population Activity. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(4).

van den Berg MM, et al. (2024) Sodium salicylate improves detection of amplitude-modulated sound in mice. *iScience*, 27(5), 109691.

McNally MA, et al. (2024) Ongoing loss of viable neurons for weeks after mild perinatal hypoxia-ischemia. *bioRxiv : the preprint server for biology*.

Yang L, et al. (2023) Nicotine rebalances NAD⁺ homeostasis and improves aging-related symptoms in male mice by enhancing NAMPT activity. *Nature communications*, 14(1), 900.

Suryavanshi P, et al. (2023) Brief excitotoxic insults cause a calpain-mediated increase in nuclear membrane permeability in neonatal neurons. *bioRxiv : the preprint server for biology*.

Davis BA, et al. (2023) TCF4 mutations disrupt synaptic function through dysregulation of RIMBP2 in patient-derived cortical neurons. *bioRxiv : the preprint server for biology*.

Rust R, et al. (2022) Xeno-free induced pluripotent stem cell-derived neural progenitor cells for in vivo applications. *Journal of translational medicine*, 20(1), 421.

Page SC, et al. (2022) Electrophysiological measures from human iPSC-derived neurons are associated with schizophrenia clinical status and predict individual cognitive performance. *Proceedings of the National Academy of Sciences of the United States of America*, 119(3).

Schumacher JW, et al. (2022) Selective enhancement of neural coding in V1 underlies fine-discrimination learning in tree shrew. *Current biology : CB*, 32(15), 3245.

Go MA, et al. (2021) Place Cells in Head-Fixed Mice Navigating a Floating Real-World Environment. *Frontiers in cellular neuroscience*, 15, 618658.

Agoglia RM, et al. (2021) Primate cell fusion disentangles gene regulatory divergence in neurodevelopment. *Nature*, 592(7854), 421.

Kon N, et al. (2021) Na⁺/Ca²⁺ exchanger mediates cold Ca²⁺ signaling conserved for temperature-compensated circadian rhythms. *Science advances*, 7(18).

Liu J, et al. (2019) Parallel Processing of Sound Dynamics across Mouse Auditory Cortex via Spatially Patterned Thalamic Inputs and Distinct Areal Intracortical Circuits. *Cell reports*, 27(3), 872.

Hallin EI, et al. (2018) Structure of monomeric full-length ARC sheds light on molecular flexibility, protein interactions, and functional modalities. *Journal of neurochemistry*, 147(3), 323.

Hill RA, et al. (2017) Targeted two-photon chemical apoptotic ablation of defined cell types in vivo. *Nature communications*, 8, 15837.

Pag??s S, et al. (2015) Single cell electroporation for longitudinal imaging of synaptic structure and function in the adult mouse neocortex in vivo. *Frontiers in neuroanatomy*, 9, 36.