

Resource Summary Report

Generated by [NIF](#) on Aug 24, 2026

pAAV.Syn.GCaMP6s.WPRE.SV40

RRID:Addgene_100843

Type: Plasmid

Proper Citation

RRID:Addgene_100843

Plasmid Information

URL: <http://www.addgene.org/100843>

Proper Citation: RRID:Addgene_100843

Insert Name: GCaMP6s

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:23868258](#)

Vector Backbone Description: Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: This plasmid was previously available as pAAV.Syn.GCaMP6s.WPRE.SV40(p2824) from the Penn Vector Core. This plasmid was created as part of the GENIE project at Janelia Research Campus.

Plasmid Name: pAAV.Syn.GCaMP6s.WPRE.SV40

Relevant Mutation: GCaMP3-K78H T302L R303P D380Y T381R S383T R392G

Record Creation Time: 20220422T221450+0000

Record Last Update: 20260815T080015+0000

Ratings and Alerts

No rating or validation information has been found for pAAV.Syn.GCaMP6s.WPRE.SV40.

No alerts have been found for pAAV.Syn.GCaMP6s.WPRE.SV40.

Data and Source Information

Usage and Citation Metrics

We found 95 mentions in open access literature.

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

Aydeger A, et al. (2026) Bidirectional coupling of neuronal Ca²⁺ and nitric oxide signals visualized by a dual biosensor. *Redox biology*, 91, 104094.

Hageter J, et al. (2026) A multicellular analysis calcium imaging toolbox for ImageJ. *Cell reports methods*, 6(2), 101298.

Rajan R, et al. (2026) Visual experience exerts an instructive role on cortical feedback inputs to the primary visual cortex. *Current biology : CB*, 36(4), 1033.

Chapman IF, et al. (2026) Experience and behavior modulate piriform cortex odor representation in freely moving mice. *iScience*, 29(6), 115897.

Kiral FR, et al. (2026) Generation of human pineal gland organoids with melatonin production for disease modeling. *Cell stem cell*, 33(1), 91.

Chen YC, et al. (2026) In vitro modeling of human dorsal root ganglion neurons for GCaMP6-based calcium imaging of sensory responses to HSV-1 infection. *Journal of virological methods*, 339, 115264.

Riffo-Lepe N, et al. (2026) Selective impairment of long-term depression in accumbal D1-MSNs involves calcium-permeable AMPARs in Alzheimer's disease. *bioRxiv : the preprint server for biology*.

Ocana-Santero G, et al. (2025) Perinatal serotonin signalling dynamically influences the development of cortical GABAergic circuits with consequences for lifelong sensory encoding. *Nature communications*, 16(1), 5203.

Monical A, et al. (2025) Nicotine Withdrawal Drives Aversive Behaviors by Recruiting Inhibitory Interpeduncular Nucleus Inputs to the Laterodorsal Tegmentum in Mice. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(32).

Agetsuma M, et al. (2025) Minimally invasive, wide-field two-photon imaging of the brainstem at cellular resolution. *Cell reports methods*, 5(4), 101010.

Gregory JD, et al. (2025) Immature olfactory sensory neurons provide complementary input in the healthy olfactory system. *bioRxiv : the preprint server for biology*.

Neske GT, et al. (2025) Higher-order thalamic input to cortex selectively conveys state information. *Cell reports*, 44(2), 115292.

Yoshida E, et al. (2025) Whether or not to act is determined by distinct signals from motor thalamus and orbitofrontal cortex to secondary motor cortex. *Nature communications*, 16(1), 3106.

Powell NJ, et al. (2025) Developmental maturation of millimeter-scale functional networks across brain areas. *Cerebral cortex* (New York, N.Y. : 1991), 35(2).

Ayan E, et al. (2025) X-ray crystallographic and hydrogen deuterium exchange studies confirm alternate kinetic models for homolog insulin monomers. *PloS one*, 20(4), e0319282.

Fan Y, et al. (2025) Dynamic Changes in Hindlimb Motor Cortex Neurons during Simulated Weightlessness Revealed by Miniature 2-Photon Microscopy. *Research* (Washington, D.C.), 8, 0877.

Liu D, et al. (2025) A hypothalamic circuit underlying the dynamic control of social homeostasis. *Nature*, 640(8060), 1000.

Zhang J, et al. (2025) Restoration of excitation/inhibition balance enhances neuronal signal-to-noise ratio and rescues social deficits in autism-associated *Scn2a*-deficiency. *bioRxiv : the preprint server for biology*.

Cheng Z, et al. (2025) Large field-of-view volumetric deep brain imaging through gradient-index lenses. *Nature communications*, 16(1), 9465.

Sumi T, et al. (2025) Modular architecture confers robustness to damage and facilitates recovery in spiking neural networks modeling in vitro neurons. *Frontiers in neuroscience*, 19, 1570783.