

Resource Summary Report

Generated by [SPARC SAWG](#) on Sep 19, 2026

pGP-AAV-syn-jGCaMP8f-WPRE

RRID:Addgene_162376

Type: Plasmid

Proper Citation

RRID:Addgene_162376

Plasmid Information

URL: <http://www.addgene.org/162376>

Proper Citation: RRID:Addgene_162376

Insert Name: jGCaMP8f

Organism: R. norvegicus (rat), G. gallus (chicken); A. victoria (jellyfish)

Bacterial Resistance: Ampicillin

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

Comments: For additional description and application data, see Zhang & Rózsa et al. (2023). Fast and sensitive GCaMP calcium indicators for imaging neural populations. Nature, 615(7954), 884–891. <https://doi.org/10.1038/s41586-023-05828-9>.

Plasmid Name: pGP-AAV-syn-jGCaMP8f-WPRE

Relevant Mutation: Q315L

Record Creation Time: 20220422T221918+0000

Record Last Update: 20260919T091233+0000

Ratings and Alerts

No rating or validation information has been found for pGP-AAV-syn-jGCaMP8f-WPRE.

No alerts have been found for pGP-AAV-syn-jGCaMP8f-WPRE.

Data and Source Information

Usage and Citation Metrics

We found 25 mentions in open access literature.

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

Gameiro-Ros I, et al. (2026) Uncovering NMDA receptor-mediated high firing activity in excitatory human neurons. *iScience*, 29(3), 115061.

Ellingford R, et al. (2026) Alzheimer's disease pathology degrades an NMDA receptor-dependent spontaneous activity pattern in cortico-hippocampal circuits. *Neuron*, 114(13), 2386.

Paton CD, et al. (2026) Kv2-VAP interactions enhance presynaptic ER and mitochondrial calcium influx and the mobilization of vesicles from the reserve pool. *bioRxiv : the preprint server for biology*.

Inagaki S, et al. (2026) Isotonic and minimally invasive optical clearing media for live cell imaging ex vivo and in vivo. *Nature methods*, 23(4), 839.

De Faveri F, et al. (2025) In vivo spontaneous Ca²⁺ activity in the pre-hearing mammalian cochlea. *Nature communications*, 16(1), 29.

Dorian CC, et al. (2025) Hippocampal sequences represent working memory and implicit timing. *Cell reports*, 44(10), 116383.

Pouget C, et al. (2025) Deconstruction of a Memory Engram Reveals Distinct Ensembles Recruited at Learning. *Research square*.

Kim K, et al. (2025) Micro-Coil Neuromodulation at Single-Cell and Circuit Levels for Inhibiting Natural Neuroactivity, Neutralizing Electric Neural Excitation, and Suppressing Seizures. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 12(22), e2416771.

Wisser S, et al. (2025) Rapid neonatal AAV delivery for adult cortical two-photon imaging of genetically encoded sensors. *iScience*, 28(11), 113898.

Burdge J, et al. (2025) Remote automated delivery of mechanical stimuli coupled to brain recordings in behaving mice. *eLife*, 13.

Madrugá BA, et al. (2025) Open-source, high performance miniature 2-photon microscopy systems for freely behaving animals. *Nature communications*, 16(1), 7125.

Sattin A, et al. (2025) Aberration correction in long GRIN lens-based microendoscopes for extended field-of-view two-photon imaging in deep brain regions. *eLife*, 13.

Lapanja T, et al. (2025) Pupil size modulation drives retinal activity in mice and shapes human perception. *Nature communications*, 16(1), 7334.

Fulton SL, et al. (2025) Major-depressive-disorder-associated dysregulation of ZBTB7A in orbitofrontal cortex promotes astrocyte-mediated stress susceptibility. *Neuron*, 113(16), 2656.

Pecirno SA, et al. (2025) Environmental representations in mouse hippocampal CA1 reflect the predictive structure of navigation. *Current biology : CB*, 35(24), 6100.

Cuhadar U, et al. (2024) Activity-driven synaptic translocation of LGI1 controls excitatory neurotransmission. *Cell reports*, 43(5), 114186.

Ralowicz AJ, et al. (2024) Frequency of Spontaneous Neurotransmission at Individual Boutons Corresponds to the Size of the Readily Releasable Pool of Vesicles. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 44(18).

Bayazitov IT, et al. (2024) Sound-evoked adenosine release in cooperation with neuromodulatory circuits permits auditory cortical plasticity and perceptual learning. *Cell reports*, 43(2), 113758.

Carlton AJ, et al. (2024) BAI1 localizes AMPA receptors at the cochlear afferent post-synaptic density and is essential for hearing. *Cell reports*, 43(4), 114025.

Randolph LK, et al. (2024) Regulation of synapse density by Pumilio RNA-binding proteins. *Cell reports*, 43(10), 114747.