

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

pGP-AAV-syn-FLEX-jGCaMP7b-WPRE

RRID:Addgene_104493

Type: Plasmid

Proper Citation

RRID:Addgene_104493

Plasmid Information

URL: <http://www.addgene.org/104493>

Proper Citation: RRID:Addgene_104493

Insert Name: jGCaMP7b

Organism: Rattus norvegicus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:31209382](#)

Vector Backbone Description: Backbone Marker:Scott Sternson; Backbone Size:4894; Vector Backbone:AAV-Syn-FLEX; Vector Types:Mammalian Expression, AAV, Cre/Lox; Bacterial Resistance:Ampicillin

Comments: Please visit <https://www.biorxiv.org/content/10.1101/434589v1> for bioRxiv preprint.

Plasmid Name: pGP-AAV-syn-FLEX-jGCaMP7b-WPRE

Record Creation Time: 20220422T221507+0000

Record Last Update: 20260815T080043+0000

Ratings and Alerts

No rating or validation information has been found for pGP-AAV-syn-FLEX-jGCaMP7b-WPRE.

No alerts have been found for pGP-AAV-syn-FLEX-jGCaMP7b-WPRE.

Data and Source Information

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Gobbo F, et al. (2026) Astrocyte Proximity Protects Synapses From Human Amyloid-Beta Induced Degeneration in a Mouse Ex??Vivo Model of Early Alzheimer's Disease. The European journal of neuroscience, 63(7), e70480.

Rais C, et al. (2026) Functional synaptic connectivity shapes spine stability in the hippocampus. Nature communications, 17(1).

Bender PTR, et al. (2026) Context-dependent effects of SOM neurons to enhance the responses of corticocollicular neurons to repetitive sounds. iScience, 29(5), 115536.

Mochizuki Y, et al. (2025) Distinct neural responses of ventromedial prefrontal cortex-projecting nucleus reuniens neurons during aversive memory extinction. Molecular brain, 18(1), 18.

Yu Y, et al. (2024) Comprehensive software suite for functional analysis and synaptic input mapping of dendritic spines imaged in vivo. Neurophotonics, 11(2), 024307.

Li X, et al. (2024) Link Brain-Wide Projectome to Neuronal Dynamics in the Mouse Brain. Neuroscience bulletin.

Bender PTR, et al. (2023) Synaptic zinc potentiates AMPA receptor function in mouse auditory cortex. Cell reports, 42(8), 112932.

Deem JD, et al. (2023) Identification of Hypothalamic Glucoregulatory Neurons That Sense and Respond to Changes in Glycemia. Diabetes, 72(9), 1207.

Yoneda T, et al. (2023) Experience-dependent functional plasticity and visual response selectivity of surviving subplate neurons in the mouse visual cortex. Proceedings of the National Academy of Sciences of the United States of America, 120(9), e2217011120.

Xue X, et al. (2022) Inferring monosynaptic connections from paired dendritic spine Ca2+imaging and large-scale recording of extracellular spiking. Journal of neural engineering, 19(4), 046044.

Breton-Provencher V, et al. (2022) Spatiotemporal dynamics of noradrenaline during learned behaviour. Nature, 606(7915), 732.

Franco LM, et al. (2021) A distributed circuit for associating environmental context with motor choice in retrosplenial cortex. Science advances, 7(35).

Ota K, et al. (2021) Fast, cell-resolution, contiguous-wide two-photon imaging to reveal functional network architectures across multi-modal cortical areas. Neuron, 109(11), 1810.

Lee HS, et al. (2020) Successful In vivo Calcium Imaging with a Head-Mount Miniaturized Microscope in the Amygdala of Freely Behaving Mouse. Journal of visualized experiments : JoVE(162).