

Resource Summary Report

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

pGP-AAV-syn-jGCaMP7b-WPRE

RRID:Addgene_104489

Type: Plasmid

Proper Citation

RRID:Addgene_104489

Plasmid Information

URL: <http://www.addgene.org/104489>

Proper Citation: RRID:Addgene_104489

Insert Name: jGCaMP7b

Organism: Rattus norvegicus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:31209382](#)

Vector Backbone Description: Backbone Size:4579; Vector Backbone:AAV-Syn; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

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

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

Record Creation Time: 20220422T221507+0000

Record Last Update: 20260815T080042+0000

Ratings and Alerts

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

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

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 18 mentions in open access literature.

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

Niethard N, et al. (2026) Sleep spindles promote hippocampal network downregulation during sleep. *Current biology* : CB, 36(6), 1385.

Hernandez DE, et al. (2025) Fast updating feedback from piriform cortex to the olfactory bulb relays multimodal identity and reward contingency signals during rule-reversal. *Nature communications*, 16(1), 937.

Ohno S, et al. (2025) The medial prefrontal cortex encodes procedural rules as sequential neuronal activity dynamics. *Molecular brain*, 18(1), 56.

Turi GF, et al. (2025) Serotonin modulates infraslow oscillation in the dentate gyrus during non-REM sleep. *eLife*, 13.

Hughes CL, et al. (2025) Spatiotemporal properties of cortical excitatory and inhibitory neuron activation by sustained and bursting electrical microstimulation. *iScience*, 28(6), 112707.

Fernholz MHP, et al. (2024) DeepD3, an open framework for automated quantification of dendritic spines. *PLoS computational biology*, 20(2), e1011774.

Vermaercke B, et al. (2024) SYNGAP1 deficiency disrupts synaptic neoteny in xenotransplanted human cortical neurons in vivo. *Neuron*, 112(18), 3058.

Liiv M, et al. (2024) ER calcium depletion as a key driver for impaired ER-to-mitochondria calcium transfer and mitochondrial dysfunction in Wolfram syndrome. *Nature communications*, 15(1), 6143.

Abdou K, et al. (2024) Prefrontal coding of learned and inferred knowledge during REM and NREM sleep. *Nature communications*, 15(1), 4566.

Mackay JP, et al. (2023) Axonal ER Ca²⁺ Release Selectively Enhances Activity-Independent Glutamate Release in a Huntington Disease Model. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 43(20), 3743.

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

Voitov I, et al. (2022) Cortical feedback loops bind distributed representations of working memory. *Nature*, 608(7922), 381.

Fieblinger T, et al. (2022) Presynaptic cGMP sets synaptic strength in the striatum and is important for motor learning. *EMBO reports*, 23(8), e54361.

Bauer J, et al. (2021) Limited functional convergence of eye-specific inputs in the retinogeniculate pathway of the mouse. *Neuron*, 109(15), 2457.

Gobbo F, et al. (2020) Neuronal Activity at Synapse Resolution: Reporters and Effectors for Synaptic Neuroscience. *Frontiers in molecular neuroscience*, 13, 572312.

Pu?cian A, et al. (2020) NMDAR-Dependent Emergence of Behavioral Representation in Primary Visual Cortex. *Cell reports*, 32(4), 107970.

Jacob T, et al. (2019) A Proposed Mechanism for Spontaneous Transitions between Interictal and Ictal Activity. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 39(3), 557.

Safiulina D, et al. (2019) Miro proteins prime mitochondria for Parkin translocation and mitophagy. *The EMBO journal*, 38(2).