

Resource Summary Report

Generated by [dkNET](#) on Sep 4, 2026

pGP-AAV-syn-FLEX-jGCaMP8m-WPRE

RRID:Addgene_162378

Type: Plasmid

Proper Citation

RRID:Addgene_162378

Plasmid Information

URL: <http://www.addgene.org/162378>

Proper Citation: RRID:Addgene_162378

Insert Name: jGCaMP8m

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

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:Scott Sternson; Vector Backbone:AAV-Syn-FLEX; Vector Types:Mammalian Expression, AAV, Cre/Lox; 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-FLEX-jGCaMP8m-WPRE

Relevant Mutation: A25G F286Y

Record Creation Time: 20220422T221918+0000

Record Last Update: 20260902T042612+0000

Ratings and Alerts

No rating or validation information has been found for pGP-AAV-syn-FLEX-jGCaMP8m-WPRE.

No alerts have been found for pGP-AAV-syn-FLEX-jGCaMP8m-WPRE.

Data and Source Information

Usage and Citation Metrics

We found 26 mentions in open access literature.

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

Scheib J, et al. (2026) Distinct sensorimotor encoding in tuft dendrites and somata associated with action, correction, and learning. bioRxiv : the preprint server for biology.

Bratsch-Prince JX, et al. (2026) vCA1 SST neurons represent avoidance states that guide anxiety-related behavioral choices. bioRxiv : the preprint server for biology.

Arinel M, et al. (2026) Gut distension evokes rapid neural dynamics in vagal and hindbrain populations of larval zebrafish. iScience, 29(6), 116206.

Adsit LM, et al. (2026) Functional and structural characterization of dendritic spine pathology in a mouse model of tauopathy. bioRxiv : the preprint server for biology.

Ayupov T, et al. (2026) Cell-type-targeted mitochondrial transplantation rescues cell degeneration. Nature, 653(8113), 221.

Moberg S, et al. (2026) Distinct roles of cortical layer 5 subtypes in associative learning. Nature communications, 17(1).

Nowacka A, et al. (2026) Synapse-specific and plasticity-regulated AMPA receptor mobility tunes synaptic integration. Neuron, 114(6), 1083.

Tsutsui-Kimura I, et al. (2025) Dopamine in the tail of the striatum facilitates avoidance in threat-reward conflicts. Nature neuroscience, 28(4), 795.

Sun Y, et al. (2025) Motor learning drives region-specific transcriptomic remodeling in the motor cortex and dorsal striatum. bioRxiv : the preprint server for biology.

Savani RH, et al. (2025) Individual paraventricular hypothalamic GLP-1R neurons track ingestion across energy states. iScience, 28(12), 114070.

Touponse GC, et al. (2025) Cholinergic modulation of dopamine release drives effortful behavior. bioRxiv : the preprint server for biology.

Sköld J, et al. (2025) Melanocortin 4 receptor-expressing neurons in the lateral stripe of the striatum regulate affect and motor control. iScience, 28(5), 112456.

Zhao Z, et al. (2025) Direct interoceptive input to the insular cortex shapes learned feeding behavior. bioRxiv : the preprint server for biology.

Shrivastava K, et al. (2025) Energy state guides reward seeking via an extended amygdala to lateral hypothalamus pathway. Nature communications, 16(1), 4474.

Silverman D, et al. (2025) Activation of locus coeruleus noradrenergic neurons rapidly drives homeostatic sleep pressure. *Science advances*, 11(3), eadq0651.

Cranfill SL, et al. (2025) Asymmetric lateral habenula function and peripheral neural mechanisms in regulating itch-evoked scratching. *Current biology : CB*, 35(24), 6180.

Roth RH, et al. (2024) Thalamic integration of basal ganglia and cerebellar circuits during motor learning. *bioRxiv : the preprint server for biology*.

Kashiwagi M, et al. (2024) A pontine-medullary loop crucial for REM sleep and its deficit in Parkinson's disease. *Cell*, 187(22), 6272.

Takács V, et al. (2024) Synaptic and dendritic architecture of different types of hippocampal somatostatin interneurons. *PLoS biology*, 22(3), e3002539.

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.