

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.

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

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.

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.

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

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.

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.