

Resource Summary Report

Generated by [NIF](#) on Jul 30, 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: 20260725T074134+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 18 mentions in open access literature.

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

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

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.

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.

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

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

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

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

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

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.

Wang HC, et al. (2024) Degraded tactile coding in the *Cntnap2* mouse model of autism. *Cell reports*, 43(8), 114612.

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

Fan W, et al. (2024) Locus Ceruleus Dynamics Are Suppressed during Licking and Enhanced Postlicking Independent of Taste Novelty. *eNeuro*, 11(4).

Hughes AC, et al. (2023) A Novel Single Vector Intersectional AAV Strategy for Interrogating Cellular Diversity and Brain Function. *bioRxiv : the preprint server for biology*.

Elias LJ, et al. (2023) Touch neurons underlying dopaminergic pleasurable touch and sexual receptivity. *Cell*, 186(3), 577.

Liu S, et al. (2022) Divergent brainstem opioidergic pathways that coordinate breathing with pain and emotions. *Neuron*, 110(5), 857.

Kang SJ, et al. (2022) A central alarm system that gates multi-sensory innate threat cues to the amygdala. *Cell reports*, 40(7), 111222.