

Resource Summary Report

Generated by [RRID](#) on Sep 2, 2026

pAAV.Syn.Flex.GCaMP6m.WPRE.SV40

RRID:Addgene_100838

Type: Plasmid

Proper Citation

RRID:Addgene_100838

Plasmid Information

URL: <http://www.addgene.org/100838>

Proper Citation: RRID:Addgene_100838

Insert Name: GCaMP6m

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:23868258](#)

Vector Backbone Description: Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: This plasmid was previously available as pAAV.Syn.Flex.GCaMP6m.WPRE.SV40 (p2820) from the Penn Vector Core. This plasmid was created as part of the GENIE project at Janelia Research Campus.

Plasmid Name: pAAV.Syn.Flex.GCaMP6m.WPRE.SV40

Relevant Mutation: GCaMP3-T302L R303P M378G K379S D380Y T381R S383T R392G

Record Creation Time: 20220422T221450+0000

Record Last Update: 20260902T040930+0000

Ratings and Alerts

No rating or validation information has been found for pAAV.Syn.Flex.GCaMP6m.WPRE.SV40.

No alerts have been found for pAAV.Syn.Flex.GCaMP6m.WPRE.SV40.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 27 mentions in open access literature.

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

Ly A, et al. (2025) Assessing the role of BNST GABA neurons in backward conditioned suppression. bioRxiv : the preprint server for biology.

Lewter LA, et al. (2025) The role of amygdala calcitonin gene-related peptide receptors on the development of persistent bladder pain in mice. bioRxiv : the preprint server for biology.

Zhang N, et al. (2025) Altered thermal preference by preoptic estrogen receptor alpha neurons in postpartum females. Molecular metabolism, 93, 102108.

Manjila SB, et al. (2025) Brain-wide connectivity and novelty response of the dorsal endopiriform nucleus in mice. Cell reports, 44(7), 115827.

Liu Y, et al. (2025) Prolonged exposure to food odors suppresses feeding via an olfactory bulb-to-hypothalamus circuit. Nature communications, 16(1), 7892.

Ly A, et al. (2025) VGluT3 BNST neurons transmit GABA and restrict sucrose consumption. Molecular metabolism, 98, 102178.

Ly A, et al. (2025) VGluT3 BNST neurons transmit GABA and restrict feeding without affecting rewarding or aversive processing. bioRxiv : the preprint server for biology.

Liu J, et al. (2025) Lateral septal inhibition of nucleus basalis through direct and indirect pathways in focal limbic seizures. bioRxiv : the preprint server for biology.

Masala N, et al. (2024) Aberrant hippocampal Ca²⁺ microwaves following synapsin-dependent adeno-associated viral expression of Ca²⁺ indicators. eLife, 13.

Piantadosi SC, et al. (2024) Hyperactivity of indirect pathway-projecting spiny projection neurons promotes compulsive behavior. Nature communications, 15(1), 4434.

Zhang Y, et al. (2024) Feedforward inhibition of stress by brainstem neuropeptide Y neurons. Nature communications, 15(1), 7603.

Jiang Z, et al. (2024) Dopaminergic Neurons in Zona Incerta Drives Appetitive Self-Grooming. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(36), e2308974.

Cai J, et al. (2024) An excitatory projection from the basal forebrain to the ventral tegmental area that underlies anorexia-like phenotypes. Neuron, 112(3), 458.

Sullere S, et al. (2023) A cholinergic circuit that relieves pain despite opioid tolerance. *Neuron*, 111(21), 3414.

Masala N, et al. (2023) Aberrant hippocampal Ca²⁺ micro-waves following synapsin-dependent adenoviral expression of Ca²⁺ indicators. *bioRxiv* : the preprint server for biology.

Farrell K, et al. (2022) Midbrain dopamine neurons signal phasic and ramping reward prediction error during goal-directed navigation. *Cell reports*, 41(2), 111470.

Abraham AD, et al. (2022) Optogenetic stimulation of dynorphinergic neurons within the dorsal raphe activate kappa opioid receptors in the ventral tegmental area and ablation of dorsal raphe prodynorphin or kappa receptors in dopamine neurons blocks stress potentiation of cocaine reward. *Addiction neuroscience*, 1.

Empl L, et al. (2022) Selective plasticity of callosal neurons in the adult contralesional cortex following murine traumatic brain injury. *Nature communications*, 13(1), 2659.

Kasai M, et al. (2022) Effects of Light Isoflurane Anesthesia on Organization of Direction and Orientation Selectivity in the Superficial Layer of the Mouse Superior Colliculus. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 42(4), 619.

Jung S, et al. (2022) A forebrain neural substrate for behavioral thermoregulation. *Neuron*, 110(2), 266.