

Resource Summary Report

Generated by [RRID](#) on Aug 21, 2026

pAAV-GFAP-EGFP

RRID:Addgene_50473

Type: Plasmid

Proper Citation

RRID:Addgene_50473

Plasmid Information

URL: <http://www.addgene.org/50473>

Proper Citation: RRID:Addgene_50473

Insert Name: EGFP

Organism: Aequorea victoria

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Size:4818; Vector Backbone:pAAV; Vector Types:AAV; Bacterial Resistance:Ampicillin

Comments: These plasmids were generated as part of the Illuminating the Druggable Genome (IDG) program sponsored by the NIH Common Fund. The goal of this program is to identify, gather, and distribute information and resources for proteins that currently are not well-studied yet belong to commonly drug-targeted protein families: protein kinases, non-olfactory G-protein coupled receptors (GPCRs), and ion channels. The IDG program is designed to develop fundamental research tools for understudied proteins, elucidate their function, and disseminate the IDG-related resources and data to the greater scientific community.

Plasmid Name: pAAV-GFAP-EGFP

Record Creation Time: 20220422T222258+0000

Record Last Update: 20260815T081606+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-GFAP-EGFP.

No alerts have been found for pAAV-GFAP-EGFP.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 25 mentions in open access literature.

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

Li H, et al. (2025) Therapeutic reduction of neurocan in murine intracerebral hemorrhage lesions promotes oligodendrogenesis and functional recovery. *Journal of neuroinflammation*, 22(1), 2.

Fulton SL, et al. (2025) Major-depressive-disorder-associated dysregulation of ZBTB7A in orbitofrontal cortex promotes astrocyte-mediated stress susceptibility. *Neuron*, 113(16), 2656.

Mongrédien R, et al. (2025) Astrocytes Control Cocaine-Induced Synaptic Plasticity and Reward Through the Matricellular Protein Hevin. *Biological psychiatry*.

Kaplelach AK, et al. (2025) Delivering Progranulin to Astrocytic Lysosomes Promotes Growth of Co-Cultured Neurons. *Journal of neurochemistry*, 169(11), e70284.

Zhou M, et al. (2025) Ngn2 and Isl1-mediated astrocyte-to-neuron conversion in vivo promotes functional recovery after spinal cord injury. *Cell reports. Medicine*, 6(12), 102462.

Le N, et al. (2025) Viral-mediated Pou5f1 (Oct4) overexpression and inhibition of Notch signaling synergistically induce neurogenic competence in mammalian Müller glia. *eLife*, 14.

Le N, et al. (2025) Viral-mediated Oct4 overexpression and inhibition of Notch signaling synergistically induce neurogenic competence in mammalian Muller glia. *bioRxiv : the preprint server for biology*.

Li X, et al. (2024) RAB12-LRRK2 Complex Suppresses Primary Ciliogenesis and Regulates Centrosome Homeostasis in Astrocytes. *bioRxiv : the preprint server for biology*.

Meadows SM, et al. (2024) Hippocampal astrocytes induce sex-dimorphic effects on memory. *Cell reports*, 43(6), 114278.

Mak A, et al. (2024) Activation of Gs Signaling in Cortical Astrocytes Does Not Influence Formation of a Persistent Contextual Memory Engram. *eNeuro*, 11(6).

Ignatenko O, et al. (2023) Mitochondrial dysfunction compromises ciliary homeostasis in astrocytes. *The Journal of cell biology*, 222(1).

Licht-Murava A, et al. (2023) Astrocytic TDP-43 dysregulation impairs memory by modulating antiviral pathways and interferon-inducible chemokines. *Science advances*,

9(16), eade1282.

Kruk PK, et al. (2023) Astrocytic CD44 Deficiency Reduces the Severity of Kainate-Induced Epilepsy. *Cells*, 12(11).

Garcia-Diaz C, et al. (2023) Glioblastoma cell fate is differentially regulated by the microenvironments of the tumor bulk and infiltrative margin. *Cell reports*, 42(5), 112472.

Le N, et al. (2022) Ectopic insert-dependent neuronal expression of GFAP promoter-driven AAV constructs in adult mouse retina. *Frontiers in cell and developmental biology*, 10, 914386.

Xiao D, et al. (2021) In vivo Regeneration of Ganglion Cells for Vision Restoration in Mammalian Retinas. *Frontiers in cell and developmental biology*, 9, 755544.

Men Y, et al. (2020) Astroglial FMRP deficiency cell-autonomously up-regulates miR-128 and disrupts developmental astroglial mGluR5 signaling. *Proceedings of the National Academy of Sciences of the United States of America*, 117(40), 25092.

Jimenez-Blasco D, et al. (2020) Glucose metabolism links astroglial mitochondria to cannabinoid effects. *Nature*, 583(7817), 603.

Byun YG, et al. (2019) In Vitro Engulfment Assay to Measure Phagocytic Activity of Astrocytes Using Synaptosomes. *Methods in molecular biology* (Clifton, N.J.), 1938, 155.

Jiang LL, et al. (2019) Membralin deficiency dysregulates astrocytic glutamate homeostasis leading to ALS-like impairment. *The Journal of clinical investigation*, 129(8), 3103.