

Resource Summary Report

Generated by [NIF](#) on Sep 14, 2026

pZac2.1 gfaABC1D-lck-GCaMP6f

RRID:Addgene_52924

Type: Plasmid

Proper Citation

RRID:Addgene_52924

Plasmid Information

URL: <http://www.addgene.org/52924>

Proper Citation: RRID:Addgene_52924

Insert Name: lck-GCaMP6f

Bacterial Resistance: Ampicillin

Vector Backbone Description: Vector Backbone:pZac2.1; Vector Types:AAV; Bacterial Resistance:Ampicillin

Plasmid Name: pZac2.1 gfaABC1D-lck-GCaMP6f

Record Creation Time: 20220422T222310+0000

Record Last Update: 20260912T092836+0000

Ratings and Alerts

No rating or validation information has been found for pZac2.1 gfaABC1D-lck-GCaMP6f.

No alerts have been found for pZac2.1 gfaABC1D-lck-GCaMP6f.

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 [NIF](#) .

Kim SH, et al. (2026) Remodeling synaptic connections via engineered neuron-astrocyte interactions. *Nature communications*, 17(1).

Lu S, et al. (2026) Astrocytes and neurons exhibit partially shared but distinct composite receptive fields for natural stimuli. *Journal of neurophysiology*, 135(2), 382.

Lind BL, et al. (2025) In vivo two-photon microscopy for studies of neurovascular coupling in rodents: a beginner's guide. *Neurophotonics*, 12(Suppl 2), S22808.

Peyton L, et al. (2025) In vivo calcium extrusion from accumbal astrocytes reduces anxiety-like behaviors but increases compulsive-like responses and compulsive ethanol drinking in mice. *Neuropharmacology*, 268, 110320.

Evans WR, et al. (2025) Chemogenetic Control of Striatal Astrocytes Improves Parkinsonian Motor Deficits in Mice. *Glia*, 73(6), 1188.

Constantin CE, et al. (2025) Ca²⁺-pumping by PMCA-neuroplastin complexes operates in the kiloHertz-range. *Nature communications*, 16(1), 7550.

Wang S, et al. (2024) Astrocytic LRRK2 Controls Synaptic Connectivity via Regulation of ERM Phosphorylation. *bioRxiv : the preprint server for biology*.

Evans WR, et al. (2024) Functional activation of dorsal striatum astrocytes improves movement deficits in hemi-parkinsonian mice. *bioRxiv : the preprint server for biology*.

Xia M, et al. (2024) Voltage-gated potassium channels control extended access cocaine seeking: a role for nucleus accumbens astrocytes. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 49(3), 551.

Lefton KB, et al. (2024) Norepinephrine Signals Through Astrocytes To Modulate Synapses. *bioRxiv : the preprint server for biology*.

Yokoyama T, et al. (2024) A multicolor suite for deciphering population coding of calcium and cAMP in vivo. *Nature methods*, 21(5), 897.

Tavakoli NS, et al. (2024) Astrocyte Ca²⁺ in the dorsal striatum suppresses neuronal activity to oppose cue-induced reinstatement of cocaine seeking. *Frontiers in cellular neuroscience*, 18, 1347491.

Codeluppi SA, et al. (2023) Prefrontal cortex astroglia modulate anhedonia-like behavior. *Molecular psychiatry*, 28(11), 4632.

Grassi D, et al. (2023) Nanoscale and functional heterogeneity of the hippocampal extracellular space. *Cell reports*, 42(5), 112478.

Bindu DS, et al. (2023) GEARBOCS: An Adeno Associated Virus Tool for In Vivo Gene Editing in Astrocytes. *bioRxiv : the preprint server for biology*.

Noh K, et al. (2023) Cortical astrocytes modulate dominance behavior in male mice by regulating synaptic excitatory and inhibitory balance. *Nature neuroscience*, 26(9), 1541.

Nippert AR, et al. (2022) Astrocyte regulation of cerebral blood flow during hypoglycemia. *Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism*, 42(8), 1534.

Asrican B, et al. (2021) Extracting meaningful circuit-based calcium dynamics in astrocytes and neurons from adult mouse brain slices using single-photon GCaMP imaging. *STAR protocols*, 2(1), 100306.

Baldwin KT, et al. (2021) HepaCAM controls astrocyte self-organization and coupling. *Neuron*, 109(15), 2427.

Henneberger C, et al. (2020) LTP Induction Boosts Glutamate Spillover by Driving Withdrawal of Perisynaptic Astroglia. *Neuron*, 108(5), 919.