

Resource Summary Report

Generated by [dkNET](#) on Aug 5, 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: 20260801T081438+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 23 mentions in open access literature.

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

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.

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

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

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.

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.

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

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.

Takano T, et al. (2020) Chemico-genetic discovery of astrocytic control of inhibition in vivo. Nature, 588(7837), 296.

Mederos S, et al. (2020) Melanopsin for Time-Controlling Activation of Astrocyte -Neuron Networks. Methods in molecular biology (Clifton, N.J.), 2173, 53.