Resource Summary Report

Generated by NIF on Sep 14, 2026

pCAG-mGFP

RRID:Addgene_14757
Type: Plasmid

Proper Citation

RRID:Addgene_14757

Plasmid Information

URL: http://www.addgene.org/14757

Proper Citation: RRID:Addgene_14757

Insert Name: membrane bound form of EGFP

Bacterial Resistance: Ampicillin

Defining Citation: PMID:17209010

Vector Backbone Description: Backbone Size:6122; Vector Backbone:pCAGEN; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: mGFP is a membrane-bound form of GFP containing a palmitoylation sequence of GAP43 at its N-terminus. The mGFP insert contains V163A and S175G compared to EGFP. These mutations are not known to affect plasmid function. The Cepko lab and several other Addgene users have used this plasmid successfully in experiments. Addgene's NGS finds an IS4-like element (ISVsa5 family transposase) in the backbone that does not affect the overall plasmid function.

Plasmid Name: pCAG-mGFP

Record Creation Time: 20220422T221825+0000

Record Last Update: 20260912T092013+0000

Ratings and Alerts

No rating or validation information has been found for pCAG-mGFP.

No alerts have been found for pCAG-mGFP.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 57 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF .

Gockel N, et al. (2026) Schizophrenia-associated complement C4 impairs synaptic connectivity and decreases microglia-synapse interactions through CR3 signaling. Cell reports, 45(4), 117161.

Zhong S, et al. (2025) Ultrabright chemical labeling enables rapid neural connectivity profiling in large tissue samples. Neuron.

Ri K, et al. (2024) Molecular mechanism of choline and ethanolamine transport in humans. Nature, 630(8016), 501.

Piers TM, et al. (2024) WNT7A-positive dendritic cytonemes control synaptogenesis in cortical neurons. Development (Cambridge, England), 151(23).

Mubuchi A, et al. (2024) Assembly of neuron- and radial glial-cell-derived extracellular matrix molecules promotes radial migration of developing cortical neurons. eLife, 12.

Nishijima T, et al. (2024) Novel artificial nerve transplantation of human iPSC-derived neurite bundles enhanced nerve regeneration after peripheral nerve injury. Inflammation and regeneration, 44(1), 6.

Uvarov P, et al. (2024) Uncovering novel KCC2 regulatory motifs through a comprehensive transposon-based mutant library. Frontiers in molecular neuroscience, 17, 1505722.

Nakatsuka D, et al. (2024) A novel GABAergic population in the medial vestibular nucleus maintains wakefulness and gates rapid eye movement sleep. iScience, 27(3), 109289.

Babij R, et al. (2023) Gabrb3 is required for the functional integration of pyramidal neuron subtypes in the somatosensory cortex. Neuron, 111(2), 256.

Shin M, et al. (2023) Deup1 Expression Interferes with Multiciliated Differentiation. Molecules and cells, 46(12), 746.

Kwan HR, et al. (2023) Nerve-independent formation of membrane infoldings at topologically complex postsynaptic apparatus by caveolin-3. Science advances, 9(24), eadg0183.

Tejeda-Munoz N, et al. (2023) The PMA phorbol ester tumor promoter increases canonical Wnt signaling via macropinocytosis. eLife, 12.

Azbazdar Y, et al. (2023) Addition of exogenous diacylglycerol enhances Wnt/?-catenin signaling through stimulation of macropinocytosis. iScience, 26(10), 108075.

Rekler D, et al. (2022) Completion of neural crest cell production and emigration is regulated by retinoic-acid-dependent inhibition of BMP signaling. eLife, 11.

Roellig D, et al. (2022) Force-generating apoptotic cells orchestrate avian neural tube bending. Developmental cell, 57(6), 707.

Tejeda-Muñoz N, et al. (2022) Canonical Wnt signaling induces focal adhesion and Integrin beta-1 endocytosis. iScience, 25(4), 104123.

Lankford C, et al. (2022) Identification of HCN1 as a 14-3-3 client. PloS one, 17(6), e0268335.

Müller JA, et al. (2022) A presynaptic phosphosignaling hub for lasting homeostatic plasticity. Cell reports, 39(3), 110696.

Tejeda-Muñoz N, et al. (2022) Protocol for culturing and imaging of ectodermal cells from Xenopus. STAR protocols, 3(3), 101455.

Sargeant J, et al. (2021) ALG-2 and peflin regulate COPII targeting and secretion in response to calcium signaling. The Journal of biological chemistry, 297(6), 101393.