

Resource Summary Report

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

pAAV-hSyn-DIO-mCherry

RRID:Addgene_50459

Type: Plasmid

Proper Citation

RRID:Addgene_50459

Plasmid Information

URL: <http://www.addgene.org/50459>

Proper Citation: RRID:Addgene_50459

Insert Name: mCherry

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-hSyn-DIO-mCherry

Record Creation Time: 20220422T222258+0000

Record Last Update: 20260815T081608+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-hSyn-DIO-mCherry.

No alerts have been found for pAAV-hSyn-DIO-mCherry.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 388 mentions in open access literature.

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

Cover KK, et al. (2026) A Distinct Circuit for Biasing Visual Perceptual Decisions and Modulating Superior Colliculus Activity through the Mouse Posterior Striatum. The Journal of neuroscience : the official journal of the Society for Neuroscience, 46(7).

Kalyanasundar B, et al. (2026) Somatostatin neurons in the rostral nucleus of the solitary tract are functionally heterogeneous. bioRxiv : the preprint server for biology.

Min H, et al. (2026) Projection-defined hypothalamic outputs differentially regulate thermogenesis and lipolysis. Proceedings of the National Academy of Sciences of the United States of America, 123(22), e2535878123.

Cheng KH, et al. (2026) Conditional deletion of Cc2d1a increases irritability-like behavior by decreasing oxytocin expression via the prelimbic-hypothalamic pathway. Journal of biomedical science, 33(1).

Heimbach SN, et al. (2026) Temporal cortex astrocytic Gi-GPCR signaling regulates learned threat responses. bioRxiv : the preprint server for biology.

Livrizzi G, et al. (2026) Top-down control of the descending pain modulatory system drives multimodal placebo analgesia. Neuron.

Han Y, et al. (2026) Dorsal CA1 projections to nucleus accumbens and lateral septum differentially regulate social and locomotor behavior. Cerebral cortex (New York, N.Y. : 1991), 36(5).

Burckhardt A, et al. (2026) Differential effects of orexin system activation on dizocilpine-induced schizophrenia-like behaviors in mice. Neuropeptides, 116, 102587.

Bystrom LL, et al. (2026) Parabrachial CGRP Neurons Regulate Opioid Reinforcement. bioRxiv : the preprint server for biology.

Kumar S, et al. (2026) A distinct vagus-beta cell neural circuit senses glucose and modulates insulin secretion. Molecular metabolism, 108, 102371.

O'Chan JC, et al. (2026) Dopamine drives persistent remodelling of the maternal brain. Nature, 654(8118), 465.

Wang Z, et al. (2026) Chronic activation of corticospinal tract neurons after pyramidotomy injury enhances neither behavioral recovery nor axonal sprouting. Experimental neurology, 403, 115810.

McMurray KMJ, et al. (2026) Projections from subfornical organ to infralimbic cortex modulate carbon dioxide associated fear. *bioRxiv : the preprint server for biology*.

de Le??n Reyes NS, et al. (2026) Interhemispheric CA1 projections to the subiculum support spatial cognition and are affected in a mouse model of the 22q11.2 deletion syndrome. *Cell reports*, 45(4), 117114.

Cruz-Sanchez A, et al. (2026) Maturation of hippocampus-medial prefrontal cortex projections defines a pathway-specific sensitive period for cognitive flexibility. *Cell reports*, 45(1), 116812.

Li Y, et al. (2026) A spatial and projection-based transcriptomic atlas of paraventricular hypothalamic cell types. *Cell reports*, 45(2), 116904.

Lin Y, et al. (2026) Pharmacological administration of FGF21 reverses obesity through a parabrachial-projecting neuron population in the hindbrain. *Cell reports*, 45(4), 117093.

Singh S, et al. (2026) CGRP receptor-expressing neurons in the central amygdala contributes to injury-induced pain hypersensitivity. *bioRxiv : the preprint server for biology*.

Dos-Santos RC, et al. (2026) Norepinephrine neurons in the locus coeruleus and the nucleus of the solitary tract drive different stress-related behavioral outputs in mice. *Neurobiology of stress*, 42, 100802.

Nowacka A, et al. (2026) Synapse-specific and plasticity-regulated AMPA receptor mobility tunes synaptic integration. *Neuron*, 114(6), 1083.