

Resource Summary Report

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

[pAAV-EF1a-DIO-mCherry](#)

RRID:Addgene_50462

Type: Plasmid

Proper Citation

RRID:Addgene_50462

Plasmid Information

URL: <http://www.addgene.org/50462>

Proper Citation: RRID:Addgene_50462

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-EF1a-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-EF1a-DIO-mCherry.

No alerts have been found for pAAV-EF1a-DIO-mCherry.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 34 mentions in open access literature.

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

Guillaumin A, et al. (2026) Dorsal Raphe VIP Neurons Are Critical for Survival-Oriented Vigilance. *Advanced science* (Weinheim, Baden-Wurttemberg, Germany), 13(18), e23809.

Moffa JC, et al. (2025) An Alternative Gene Editing Strategy Using a Single AAV Vector. *Bio-protocol*, 15(13), e5362.

Yamada S, et al. (2025) Neuropeptide Y neurons in the basolateral amygdala project to the nucleus accumbens and stimulate high-fat intake. *Frontiers in cellular neuroscience*, 19, 1565939.

Thanawalla AR, et al. (2025) Cerebellar outputs for rapid directional refinement of forelimb movement. *bioRxiv : the preprint server for biology*.

Montalban E, et al. (2025) Striatal astrocytes modulate behavioral flexibility and whole-body metabolism in mice. *Nature communications*, 16(1), 5417.

Hawes S, et al. (2025) Patchy Striatonigral Neurons Modulate Locomotor Vigor in Response to Environmental Valence. *bioRxiv : the preprint server for biology*.

Bir?? L, et al. (2025) Convergence and Segregation of Excitatory and Inhibitory Afferents in the Paraventricular Thalamic Nucleus. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(43).

Cao F, et al. (2025) Gustatory thalamic neurons mediate aversive behaviors. *Nature communications*, 16(1), 8517.

Li R, et al. (2025) Functional Roles of Gastrin-Releasing Peptide-Producing Neurons in the Suprachiasmatic Nucleus: Insights into Photic Entrainment and Circadian Regulation. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(25).

Boyle LM, et al. (2025) The ventral CA2 region of the hippocampus and its differential contributions to social memory and social aggression. *Cell reports*, 44(5), 115714.

Zhou S, et al. (2025) A midbrain circuit mechanism for noise-induced negative valence coding. *Nature communications*, 16(1), 4610.

Condon LF, et al. (2024) Parabrachial Calca neurons drive nociplasticity. *Cell reports*, 43(4), 114057.

Matsuda T, et al. (2024) Two parabrachial Cck neurons involved in the feedback control of thirst or salt appetite. *Cell reports*, 43(1), 113619.

Narimatsu Y, et al. (2023) Neurosecretory Protein GM-Expressing Neurons Participate in Lipid Storage and Inflammation in Newly Developed Cre Driver Male Mice. *Biomedicines*, 11(12).

Wen YX, et al. (2023) Oxytocinergic neurons, but not oxytocin, are crucial for male penile erection. *Neuropharmacology*, 235, 109576.

Hassan SI, et al. (2023) Social odor discrimination and its enhancement by associative learning in the hippocampal CA2 region. *Neuron*, 111(14), 2232.

Liu S, et al. (2022) Divergent brainstem opioidergic pathways that coordinate breathing with pain and emotions. *Neuron*, 110(5), 857.

Liu Z, et al. (2022) Deficiency in endocannabinoid synthase DAGLB contributes to early onset Parkinsonism and murine nigral dopaminergic neuron dysfunction. *Nature communications*, 13(1), 3490.

Schneeberger M, et al. (2022) Pharmacological targeting of glutamatergic neurons within the brainstem for weight reduction. *Nature metabolism*, 4(11), 1495.

Shen L, et al. (2022) A bottom-up reward pathway mediated by somatostatin neurons in the medial septum complex underlying appetitive learning. *Nature communications*, 13(1), 1194.