

Resource Summary Report

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

pAAV-hSyn-DIO-EGFP

RRID:Addgene_50457

Type: Plasmid

Proper Citation

RRID:Addgene_50457

Plasmid Information

URL: <http://www.addgene.org/50457>

Proper Citation: RRID:Addgene_50457

Insert Name: EGFP

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-EGFP

Record Creation Time: 20220422T222258+0000

Record Last Update: 20260815T081606+0000

Ratings and Alerts

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

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

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 127 mentions in open access literature.

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

Roessler JM, et al. (2026) A Preoptic Neurocircuit That Modulates Metabolic Flexibility. bioRxiv : the preprint server for biology.

Supiot LF, et al. (2026) A prefrontal cortex-lateral hypothalamus circuit controls stress-driven increased food intake. Nature communications, 17(1).

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).

Gallagher AV, et al. (2026) Safety Signals Enable Single-Episode Active Avoidance paradigm and Expose Threat Generalization in Tuberous Sclerosis Complex. bioRxiv : the preprint server for biology.

Mendoza JM, et al. (2026) Corticotropin releasing hormone-expressing inputs to the thalamic paraventricular nucleus: pathways from mother to memory? Neurobiology of stress, 41, 100794.

Li SJ, et al. (2026) A disinhibitory basal forebrain-to-cortex projection supports sustained attention. Cell, 189(13), 4140.

Carter CA, et al. (2026) Divergent Roles of Nucleus Accumbens D1- and D2-MSNs in Regulating Hedonic Feeding. The Journal of neuroscience : the official journal of the Society for Neuroscience, 46(10).

Locarno A, et al. (2026) Endocannabinoid modulation of a reciprocal fronto-coerulear connection in contextual discrimination. Cell reports, 45(4), 117141.

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

Iqbal J, et al. (2026) A prelimbic molecular clock of protein synthesis for memory persistence. bioRxiv : the preprint server for biology.

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.

Chen SY, et al. (2026) Activity-dependent development of vocal circuits in the neonatal rodent forebrain. EMBO reports, 27(13), 3632.

Liiwand M, et al. (2026) Loss of the Mecp2 gene in parvalbumin interneurons leads to an inhibitory deficit in the amygdala and affects its functional connectivity. *Molecular autism*, 17(1), 4.

Gao H, et al. (2026) The sympathoregulatory region of the mouse rostral brainstem relies on both GABA and glycine to generate inhibitory currents. *The Journal of physiology*, 604(7), 2939.

Raven F, et al. (2026) Dentate gyrus network regulation by somatostatin- and parvalbumin-expressing interneurons differentially impacts spatial memory processing. *iScience*, 29(3), 115067.

Godschall EN, et al. (2026) A brain reward circuit inhibited by next-generation weight-loss drugs in mice. *Nature*, 654(8120), 1055.

Gobbo F, et al. (2026) Astrocyte Proximity Protects Synapses From Human Amyloid-Beta Induced Degeneration in a Mouse Ex??Vivo Model of Early Alzheimer's Disease. *The European journal of neuroscience*, 63(7), e70480.

Vuong C, et al. (2026) The hindbrain-hypothalamic noradrenergic pathway controls homeostatic food intake but not cue-induced appetitive behaviors. *Journal of neuroendocrinology*, 38(7), e70229.

Miyasaka A, et al. (2025) Sequential transitions of male sexual behaviors driven by dual acetylcholine-dopamine dynamics. *Neuron*, 113(8), 1240.

Ly A, et al. (2025) VGluT3 BNST neurons transmit GABA and restrict feeding without affecting rewarding or aversive processing. *bioRxiv : the preprint server for biology*.