

Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 15, 2025

pAAV-hSyn-hM4D(Gi)-mCherry

RRID:Addgene_50475

Type: Plasmid

Proper Citation

RRID:Addgene_50475

Plasmid Information

URL: <http://www.addgene.org/50475>

Proper Citation: RRID:Addgene_50475

Insert Name: hM4D(Gi)-mCherry

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:](#)

Vector Backbone Description: Backbone Size:4818; Vector Backbone:pAAV; Vector Types:AAV; Bacterial Resistance:Ampicillin

Comments: Please Note- This plasmid does NOT contain an N-terminal HA tag. 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-hM4D(Gi)-mCherry

Relevant Mutation: See supplemental documents for DREADD mutations

Record Creation Time: 20220422T222258+0000

Record Last Update: 20241023T080830+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-hSyn-hM4D(Gi)-mCherry.

No alerts have been found for pAAV-hSyn-hM4D(Gi)-mCherry.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 46 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Viellard JMA, et al. (2024) A subiculum-hypothalamic pathway functions in dynamic threat detection and memory updating. *Current biology : CB*, 34(12), 2657.

Parra Bravo C, et al. (2024) Human iPSC 4R tauopathy model uncovers modifiers of tau propagation. *Cell*, 187(10), 2446.

Cobb-Lewis D, et al. (2024) The lateral habenula integrates age and experience to promote social transitions in developing rats. *Cell reports*, 43(8), 114556.

Hoyer J, et al. (2024) Polymodal sensory perception drives settlement and metamorphosis of *Ciona* larvae. *Current biology : CB*, 34(6), 1168.

Kovács P, et al. (2024) Perturbing cortical networks: in vivo electrophysiological consequences of pan-neuronal chemogenetic manipulations using deschloroclozapine. *Frontiers in neuroscience*, 18, 1396978.

Ollivier M, et al. (2024) Crym-positive striatal astrocytes gate perseverative behaviour. *Nature*, 627(8003), 358.

Gulledge AT, et al. (2024) Cholinergic Activation of Corticofugal Circuits in the Adult Mouse Prefrontal Cortex. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 44(3).

McDevitt DS, et al. (2024) The Paraventricular Thalamic Nucleus and Its Projections in Regulating Reward and Context Associations. *eNeuro*, 11(2).

Mishra I, et al. (2024) The cerebellum modulates thirst. *Nature neuroscience*, 27(9), 1745.

Chang H, et al. (2024) Stress-sensitive neural circuits change the gut microbiome via duodenal glands. *Cell*, 187(19), 5393.

Zhao Z, et al. (2024) Cannabinoids regulate an insula circuit controlling water intake. *Current biology : CB*, 34(9), 1918.

Consorti A, et al. (2024) An essential role for the latero-medial secondary visual cortex in the acquisition and retention of visual perceptual learning in mice. *Nature communications*, 15(1), 7322.

Mitsuhashi M, et al. (2024) Stage-dependent role of interhemispheric pathway for motor recovery in primates. *Nature communications*, 15(1), 6762.

Sitzia G, et al. (2024) Chronic alcohol induces subcircuit-specific striatonigral plasticity enhancing the sensorimotor basal ganglia role in action execution. *Science advances*, 10(26), eadm6951.

Fetterly TL, et al. (2024) Effects of junk-food on food-motivated behavior and nucleus accumbens glutamate plasticity; insights into the mechanism of calcium-permeable AMPA receptor recruitment. *Neuropharmacology*, 242, 109772.

Benedict J, et al. (2024) The lateral habenula is required for maternal behavior in the mouse dam. *bioRxiv : the preprint server for biology*.

Basu R, et al. (2024) Ventromedial hypothalamic nucleus subset stimulates tissue thermogenesis via preoptic area outputs. *Molecular metabolism*, 84, 101951.

Krizan J, et al. (2024) Predation without direction selectivity. *Proceedings of the National Academy of Sciences of the United States of America*, 121(12), e2317218121.

Fitzpatrick MJ, et al. (2024) A pupillary contrast response in mice and humans: Neural mechanisms and visual functions. *Neuron*, 112(14), 2404.

Concina G, et al. (2024) Hippocampus-to-amygdala pathway drives the separation of remote memories of related events. *Cell reports*, 43(5), 114151.