

Resource Summary Report

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

pAAV-GFAP-HA-rM3D(Gs)-IRES-mCitrine

RRID:Addgene_50472

Type: Plasmid

Proper Citation

RRID:Addgene_50472

Plasmid Information

URL: <http://www.addgene.org/50472>

Proper Citation: RRID:Addgene_50472

Insert Name: rM3D-IRES-mCitrine

Organism: Homo sapiens

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-GFAP-HA-rM3D(Gs)-IRES-mCitrine

Relevant Mutation: See supplemental documents for DREADD mutations

Record Creation Time: 20220422T222258+0000

Record Last Update: 20260815T081606+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-GFAP-HA-rM3D(Gs)-IRES-mCitrine.

No alerts have been found for pAAV-GFAP-HA-rM3D(Gs)-IRES-mCitrine.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Cabrera-Cabrera F, et al. (2026) Norepinephrine Couples Astrocytic Metabolism to mTOR-Driven Protein Synthesis. *Journal of neurochemistry*, 170(7), e70507.

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

Williamson MR, et al. (2025) Learning-associated astrocyte ensembles regulate memory recall. *Nature*, 637(8045), 478.

Meadows SM, et al. (2024) Hippocampal astrocytes induce sex-dimorphic effects on memory. *Cell reports*, 43(6), 114278.

Mak A, et al. (2024) Activation of Gs Signaling in Cortical Astrocytes Does Not Influence Formation of a Persistent Contextual Memory Engram. *eNeuro*, 11(6).

Fan XC, et al. (2021) Rac1 Signaling in Amygdala Astrocytes Regulates Fear Memory Acquisition and Retrieval. *Neuroscience bulletin*, 37(7), 947.

Liao Z, et al. (2017) Fear Conditioning Downregulates Rac1 Activity in the Basolateral Amygdala Astrocytes to Facilitate the Formation of Fear Memory. *Frontiers in molecular neuroscience*, 10, 396.