Resource Summary Report

Generated by RRID on Aug 31, 2026

pAAV-hSyn-GRAB_ACh3.0

RRID:Addgene_121922
Type: Plasmid

Proper Citation

RRID:Addgene_121922

Plasmid Information

URL: http://www.addgene.org/121922

Proper Citation: RRID:Addgene_121922

Insert Name: GPCR activation based ACh sensor GRAB-ACh3.0

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: PMID:32989318

Vector Backbone Description: Backbone Size:4495; Vector Backbone:pAAV vector; Vector Types:AAV; Bacterial Resistance:Ampicillin

Plasmid Name: pAAV-hSyn-GRAB_ACh3.0

Record Creation Time: 20220422T221638+0000

Record Last Update: 20260829T075327+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-hSyn-GRAB_ACh3.0.

No alerts have been found for pAAV-hSyn-GRAB_ACh3.0.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 13 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Belal M, et al. (2026) Cholinergic interneuron control of GABAergic circuits targeting spiny projection neurons is disrupted in parkinsonian models. bioRxiv : the preprint server for biology.

Roshgadol JI, et al. (2025) Sensitive dLight3 for imaging broad-spectrum dopamine events across brain regions. Research square.

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

Patton MH, et al. (2025) Schizophrenia-associated 22q11.2 deletion elevates striatal acetylcholine and disrupts thalamostriatal projections to produce amotivation in mice. bioRxiv : the preprint server for biology.

Nielsen BE, et al. (2025) Postsynaptic adaptations in direct pathway muscarinic M4-receptor signaling follow the temporal and regional pattern of dopaminergic degeneration. NPJ Parkinson's disease, 11(1), 186.

Carmignani A, et al. (2025) Cellular Activity Modulation Mediated by Near Infrared-Irradiated Polydopamine Nanoparticles: In Vitro and Ex Vivo Investigation. ACS nano, 19(17), 16267.

Vu MT, et al. (2024) Targeted micro-fiber arrays for measuring and manipulating localized multi-scale neural dynamics over large, deep brain volumes during behavior. Neuron, 112(6), 909.

Belilos A, et al. (2023) Nucleus Accumbens Local Circuit for Cue-Dependent Aversive Learning. bioRxiv : the preprint server for biology.

Belilos A, et al. (2023) Nucleus accumbens local circuit for cue-dependent aversive learning. Cell reports, 42(12), 113488.

Martyniuk KM, et al. (2022) Dopamine D2Rs coordinate cue-evoked changes in striatal acetylcholine levels. eLife, 11.

Jain V, et al. (2022) Gain control by sparse, ultra-slow glycinergic synapses. Cell reports, 38(8), 110410.

Fleming W, et al. (2022) Cholinergic interneurons mediate cocaine extinction in male mice through plasticity across medium spiny neuron subtypes. Cell reports, 39(9), 110874.

Sethuramanujam S, et al. (2021) Rapid multi-directed cholinergic transmission in the central nervous system. Nature communications, 12(1), 1374.