

Resource Summary Report

Generated by [kravitz2](#) on Jul 31, 2026

pAAV-CAG-dLight1.1

RRID:Addgene_111067

Type: Plasmid

Proper Citation

RRID:Addgene_111067

Plasmid Information

URL: <http://www.addgene.org/111067>

Proper Citation: RRID:Addgene_111067

Insert Name: dLight1.1

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:29853555](#)

Vector Backbone Description: Backbone Size:5020; Vector Backbone:pAAV-CAG; Vector Types:AAV; Bacterial Resistance:Ampicillin

Comments: Addgene NGS identified chicken beta-actin promoter, but not the CMV enhancer and chimeric intron often associated with CAG promoters. Please see the associated diagnostic digest for plasmid verification.

Plasmid Name: pAAV-CAG-dLight1.1

Record Creation Time: 20220422T221540+0000

Record Last Update: 20260725T073505+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-CAG-dLight1.1.

No alerts have been found for pAAV-CAG-dLight1.1.

Data and Source Information

Usage and Citation Metrics

We found 24 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Greenstreet F, et al. (2025) Dopaminergic action prediction errors serve as a value-free teaching signal. *Nature*, 643(8074), 1333.

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

Zafiri D, et al. (2025) Dopamine prediction error signaling in a unique nigrostriatal circuit is critical for associative fear learning. *Nature communications*, 16(1), 3066.

Fry BR, et al. (2025) Devaluing memories of reward: a case for dopamine. *Communications biology*, 8(1), 161.

Toth BA, et al. (2025) Phasic Dopamine Release in the Nucleus Accumbens Influences REM Sleep Timing. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(9).

Bouabid S, et al. (2025) Distinct spatially organized striatum-wide acetylcholine dynamics for the learning and extinction of Pavlovian associations. *Nature communications*, 16(1), 5169.

Faget L, et al. (2024) Ventral pallidum GABA and glutamate neurons drive approach and avoidance through distinct modulation of VTA cell types. *Nature communications*, 15(1), 4233.

Bouabid S, et al. (2024) Spatially organized striatum-wide acetylcholine dynamics for the learning and extinction of Pavlovian cues and actions. *bioRxiv : the preprint server for biology*.

Balsam PD, et al. (2024) Learning depends on the information conveyed by temporal relationships between events and is reflected in the dopamine response to cues. *Science advances*, 10(36), eadi7137.

Blanco-Pozo M, et al. (2024) Dopamine-independent effect of rewards on choices through hidden-state inference. *Nature neuroscience*, 27(2), 286.

Phillips CD, et al. (2024) Striatal Dopamine Contributions to Skilled Motor Learning. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 44(26).

Phillips CD, et al. (2024) Striatal dopamine contributions to skilled motor learning. *bioRxiv : the preprint server for biology*.

Toth BA, et al. (2023) Striatal dopamine regulates sleep states and narcolepsy-cataplexy. *bioRxiv : the preprint server for biology*.

Markowitz JE, et al. (2023) Spontaneous behaviour is structured by reinforcement without explicit reward. *Nature*, 614(7946), 108.

Zhou J, et al. (2023) AJ76 and UH232 as potential agents for diagnosing early-stage Parkinson's disease. *Neuropharmacology*, 226, 109397.

Kutlu MG, et al. (2023) Dopamine release at the time of a predicted aversive outcome causally controls the trajectory and expression of conditioned behavior. *Cell reports*, 42(8), 112948.

Faget L, et al. (2023) Ventral pallidum GABA and glutamate neurons drive approach and avoidance through distinct modulation of VTA cell types. *bioRxiv : the preprint server for biology*.

Lee SJ, et al. (2021) Cell-type-specific asynchronous modulation of PKA by dopamine in learning. *Nature*, 590(7846), 451.

Zhou J, et al. (2021) Dopamine Neuron Challenge Test for early detection of Parkinson's disease. *NPJ Parkinson's disease*, 7(1), 116.

Yang YF, et al. (2021) Mesencephalic dopamine neurons are essential for modafinil-induced arousal. *British journal of pharmacology*, 178(24), 4808.