

Resource Summary Report

Generated by [RRID](#) on Sep 2, 2026

[pAAV-hSyn-dLight1.2](#)

RRID:Addgene_111068

Type: Plasmid

Proper Citation

RRID:Addgene_111068

Plasmid Information

URL: <http://www.addgene.org/111068>

Proper Citation: RRID:Addgene_111068

Insert Name: dLight1.2

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:29853555](#)

Vector Backbone Description: Backbone Size:4579; Vector Backbone:pAAV-hSyn;
Vector Types:AAV; Bacterial Resistance:Ampicillin

Plasmid Name: pAAV-hSyn-dLight1.2

Record Creation Time: 20220422T221540+0000

Record Last Update: 20260902T041206+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-hSyn-dLight1.2.

No alerts have been found for pAAV-hSyn-dLight1.2.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 26 mentions in open access literature.

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

Macdonald EE, et al. (2026) A synaptic mechanism for encoding the learned value of action-derived safety. *Nature communications*, 17(1).

Onimus O, et al. (2026) The gut-brain vagal axis governs mesolimbic dopamine dynamics and reward events. *Science advances*, 12(5), eadz0828.

Wallace CW, et al. (2025) Fiber photometry analysis of spontaneous dopamine signals: The z-scored data are not the data. *bioRxiv* : the preprint server for biology.

Sköld J, et al. (2025) Melanocortin 4 receptor-expressing neurons in the lateral stripe of the striatum regulate affect and motor control. *iScience*, 28(5), 112456.

Gonzalez LS, et al. (2025) Examining the role of the photopigment melanopsin in the striatal dopamine response to light. *Frontiers in systems neuroscience*, 19, 1568878.

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

Perry-Hauser NA, et al. (2025) Altered striatal dopamine regulation in ADGRL3 knockout mice. *bioRxiv* : the preprint server for biology.

Magnard R, et al. (2025) Sequence termination cues drive habits via dopamine-mediated credit assignment. *bioRxiv* : the preprint server for biology.

Fisher AA, et al. (2025) Dopaminergic encoding of future defensive actions in the mouse nucleus accumbens. *PNAS nexus*, 4(5), pgaf128.

Qü AJ, et al. (2025) Nucleus accumbens dopamine release reflects Bayesian inference during instrumental learning. *PLoS computational biology*, 21(7), e1013226.

Athanassi A, et al. (2025) Optimized workflow for behavior-coupled fiber photometry experiment: improved data navigation and accessibility. *Frontiers in neuroscience*, 19, 1601127.

Molas S, et al. (2024) Dopamine control of social novelty preference is constrained by an interpeduncular-tegmentum circuit. *Nature communications*, 15(1), 2891.

Martínez-Rivera A, et al. (2024) Elevating levels of the endocannabinoid 2-arachidonoylglycerol blunts opioid reward but not analgesia. *bioRxiv* : the preprint server for biology.

Silva A, et al. (2024) High-Precision Optical Fiber-Based Lickometer. *eNeuro*, 11(7).

Wallace CW, et al. (2024) Kappa Opioid Receptors Negatively Regulate Real Time Spontaneous Dopamine Signals by Reducing Release and Increasing Uptake. *bioRxiv* : the preprint server for biology.

Bernklau TW, et al. (2024) Striatal dopamine signals reflect perceived cue-action-outcome associations in mice. *Nature neuroscience*.

Zhao F, et al. (2024) Apoptosis signal-regulating kinase 1 (Ask1) deficiency alleviates MPP⁺-induced impairment of evoked dopamine release in the mouse hippocampus. *Frontiers in cellular neuroscience*, 18, 1288991.

Gonzalez LS, et al. (2023) Ventral striatum dopamine release encodes unique properties of visual stimuli in mice. *eLife*, 12.

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

Kundu S, et al. (2022) High throughput 3D gel-based neural organotypic model for cellular assays using fluorescence biosensors. *Communications biology*, 5(1), 1236.