

Resource Summary Report

Generated by [NIF](#) on Aug 10, 2026

pAAV-EF1a-double floxed-hChR2(H134R)-EYFP-WPRE-HGHpA

RRID:Addgene_20298

Type: Plasmid

Proper Citation

RRID:Addgene_20298

Plasmid Information

URL: <http://www.addgene.org/20298>

Proper Citation: RRID:Addgene_20298

Insert Name: channelrhodopsin-2

Organism: C. reinhardtii

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:Stratagene; Backbone Size:5604; Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: Please see <http://www.optogenetics.org> for additional information.

Plasmid Name: pAAV-EF1a-double floxed-hChR2(H134R)-EYFP-WPRE-HGHpA

Relevant Mutation: humanized ChR2 gene with histidine 134 changed to arginine, to achieve higher currents

Record Creation Time: 20220422T222050+0000

Record Last Update: 20260808T081400+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-EF1a-double floxed-hChR2(H134R)-EYFP-WPRE-HGHpA.

No alerts have been found for pAAV-EF1a-double floxed-hChR2(H134R)-EYFP-WPRE-HGHpA.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 367 mentions in open access literature.

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

Yamada Y, et al. (2026) Hindbrain neurons that underlie water discrimination and consumption. *Current biology : CB*, 36(7), 1787.

Godschall EN, et al. (2026) A brain reward circuit inhibited by next-generation weight-loss drugs in mice. *Nature*, 654(8120), 1055.

Ge X, et al. (2026) The Logic of Thalamic Inputs onto the Molecular Taxonomy of Cortical Neurons Reveals a Visual Hierarchy. *bioRxiv : the preprint server for biology*.

Haenraets K, et al. (2026) GABAergic Gbx1 neurons of the superficial dorsal horn are critical elements of a spinal circuit for stress-induced analgesia. *Neuron*, 114(12), 2221.

Raycraft LM, et al. (2026) Lateral hypothalamic melanin concentrating hormone-expressing neurons both promote and are required for cue-potentiated feeding. *Journal of neuroendocrinology*, 38(6), e70210.

Lozano DE, et al. (2026) Low-dimensional population dynamics in the brainstem gate REM sleep. *Nature neuroscience*, 29(7), 1625.

Munguba H, et al. (2026) Mechanism-guided identification of antidepressant G protein-coupled receptor drug targets. *Cell*, 189(9), 2612.

Qi T, et al. (2026) Top-down regulation of ingestive behavior fragmentation. *bioRxiv : the preprint server for biology*.

Kindel M, et al. (2026) Exercise-induced activation of ventromedial hypothalamic steroidogenic factor-1 neurons mediates improvements in endurance. *Neuron*, 114(9), 1564.

Locarno A, et al. (2026) Endocannabinoid modulation of a reciprocal fronto-coerulear connection in contextual discrimination. *Cell reports*, 45(4), 117141.

Chiu CQ, et al. (2026) SST interneurons facilitate dendritic calcium signaling via tonic activation of γ -GABA receptors. *Neuron*.

Gu Z, et al. (2026) The External Globus Pallidus is a Basal Ganglia Output Hub with Action-Specific Circuits. *bioRxiv : the preprint server for biology*.

Li Y, et al. (2026) A spatial and projection-based transcriptomic atlas of paraventricular hypothalamic cell types. *Cell reports*, 45(2), 116904.

de Velasco EMF, et al. (2026) AAV-only targeting of ventral tegmental area dopamine neurons for optical self-stimulation studies in mice. *bioRxiv : the preprint server for biology*.

Hainmueller T, et al. (2026) Dentate gyrus interneurons modulate winner-take-all network dynamics in freely behaving mice. *Neuron*.

Golbabaei A, et al. (2026) PV-dependent reorganization of prelimbic cortex sub-engrams during systems consolidation. *Neuron*, 114(1), 142.

Su Z, et al. (2026) Topographic structure and function of locus coeruleus norepinephrine neurons. *bioRxiv : the preprint server for biology*.

Dao N, et al. (2026) Paratenial thalamus engages in reciprocal and broadcast circuits with the prefrontal cortex. *bioRxiv : the preprint server for biology*.

Le QE, et al. (2026) Corticotropin-Releasing Factor and Somatostatin Neurons in the Central Amygdala Mediate Dynamic Defensive Behaviors during Fear Extinction. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 46(14).

Roessler JM, et al. (2026) A Preoptic Neurocircuit That Modulates Metabolic Flexibility. *bioRxiv : the preprint server for biology*.