Resource Summary Report

Generated by RRID on Aug 27, 2026

pAAV-hSyn-hChR2(H134R)-mCherry

RRID:Addgene_26976
Type: Plasmid

Proper Citation

RRID:Addgene_26976

Plasmid Information

URL: http://www.addgene.org/26976

Proper Citation: RRID:Addgene_26976

Insert Name: hChR2(H134R)

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:4568; Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: This plasmid contains the human synapsin I promoter. For additional information please visit - http://www.optogenetics.org

Plasmid Name: pAAV-hSyn-hChR2(H134R)-mCherry

Relevant Mutation: H134R

Record Creation Time: 20220422T222121+0000

Record Last Update: 20260815T081258+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-hSyn-hChR2(H134R)-mCherry.

No alerts have been found for pAAV-hSyn-hChR2(H134R)-mCherry.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 25 mentions in open access literature.

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

Chu E, et al. (2026) Frontal Brain Injury Reduces Sensitivity to Reward-Predictive Cues and Remodels the Nucleus Accumbens. bioRxiv : the preprint server for biology.

Gingrich EC, et al. (2026) Ten3-Lphn2-mediated target selection across the extended hippocampal network demonstrates a repeated strategy for circuit assembly. Current biology : CB, 36(10), 2622.

Kim S, et al. (2025) Alternatively spliced mini-exon B in PTP? regulates excitatory synapses through cell-type-specific trans-synaptic PTP?-IL1RAP interaction. Nature communications, 16(1), 4415.

Lee ML, et al. (2025) Body temperature regulates glucose metabolism and torpid behavior. Nature communications, 16(1), 6278.

Olson WP, et al. (2025) Muscle spindles provide flexible sensory feedback for movement sequences. Cell reports, 44(11), 116452.

Lanshakov D, et al. (2024) Transiently elevated expression of different forms of brain-derived neurotrophic factor in the neonatal medial prefrontal cortex affected anxiety and depressive-like behaviors in adolescence. PeerJ, 12, e18465.

Yaeger CE, et al. (2024) A dendritic mechanism for balancing synaptic flexibility and stability. Cell reports, 43(8), 114638.

Dodt S, et al. (2024) NPY-mediated synaptic plasticity in the extended amygdala prioritizes feeding during starvation. Nature communications, 15(1), 5439.

Licht T, et al. (2023) Adaptive olfactory circuitry restores function despite severe olfactory bulb degeneration. Current biology : CB, 33(22), 4857.

Vasudevan S, et al. (2023) Omnidirectional leaky opto-electrical fiber for optogenetic control of neurons in cell replacement therapy. Bioelectrochemistry (Amsterdam, Netherlands), 149, 108306.

Ahmed N, et al. (2023) The Basolateral Amygdala Sends a Mixed (GABAergic and Glutamatergic) Projection to the Mediodorsal Thalamic Nucleus. The Journal of neuroscience : the official journal of the Society for Neuroscience, 43(12), 2104.

Pouchelon G, et al. (2022) A versatile viral toolkit for functional discovery in the nervous system. Cell reports methods, 2(6), 100225.

Geng HY, et al. (2022) Long-range monosynaptic inputs targeting apical and basal dendrites of primary motor cortex deep output neurons. Cerebral cortex (New York, N.Y. :

1991), 32(18), 3975.

Liu H, et al. (2021) Blunted diurnal firing in lateral habenula projections to dorsal raphe nucleus and delayed photoentrainment in stress-susceptible mice. PLoS biology, 19(3), e3000709.

Brommer B, et al. (2021) Improving hindlimb locomotor function by Non-invasive AAV-mediated manipulations of propriospinal neurons in mice with complete spinal cord injury. Nature communications, 12(1), 781.

Cohen-Kashi Malina K, et al. (2021) NDNF interneurons in layer 1 gain-modulate whole cortical columns according to an animal's behavioral state. Neuron, 109(13), 2150.

Asede D, et al. (2021) Apical intercalated cell cluster: A distinct sensory regulator in the amygdala. Cell reports, 35(7), 109151.

Candelas M, et al. (2019) Cav3.2 T-type calcium channels shape electrical firing in mouse Lamina II neurons. Scientific reports, 9(1), 3112.

Lau CH, et al. (2019) Targeted Transgene Activation in the Brain Tissue by Systemic Delivery of Engineered AAV1 Expressing CRISPRa. Molecular therapy. Nucleic acids, 16, 637.

Karube F, et al. (2019) Motor cortex can directly drive the globus pallidus neurons in a projection neuron type-dependent manner in the rat. eLife, 8.