

Resource Summary Report

Generated by [RRID](#) on Aug 27, 2026

pAAV-CaMKIIa-hChR2(H134R)-mCherry

RRID:Addgene_26975

Type: Plasmid

Proper Citation

RRID:Addgene_26975

Plasmid Information

URL: <http://www.addgene.org/26975>

Proper Citation: RRID:Addgene_26975

Insert Name: hChR2(H134R)

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5386; Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: This plasmid contains the mouse calcium/calmodulin-dependent kinase II alpha subunit promoter. For additional information please visit - <http://www.optogenetics.org>

Plasmid Name: pAAV-CaMKIIa-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-CaMKIIa-hChR2(H134R)-mCherry.

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

Data and Source Information

Usage and Citation Metrics

We found 40 mentions in open access literature.

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

Kelly TJ, et al. (2026) CB1 receptor signaling at the cingulate-striatal circuit is anxiogenic. Nature communications, 17(1).

Chintalacheruvu N, et al. (2026) The anterior cingulate cortex modulates pupil-linked arousal. Science advances, 12(19), eadv5652.

McMurray KMJ, et al. (2026) Projections from subfornical organ to infralimbic cortex modulate carbon dioxide associated fear. bioRxiv : the preprint server for biology.

Harding EK, et al. (2025) Locus coeruleus microcircuitry processes periaqueductal gray inputs into distinct outputs for regulation of pain and anxiety. Cell reports, 44(12), 116699.

Silbaugh A, et al. (2025) Cerebellar climbing fibers impact experience-dependent plasticity in the mouse primary somatosensory cortex. eLife, 14.

Madeira N, et al. (2025) Thalamic input to the lateral amygdala determines the temporal window of fear-memory association. Communications biology, 8(1), 873.

Hong CY, et al. (2025) Anterior hypothalamic nucleus drives distinct defensive responses through cell-type-specific activity. iScience, 28(4), 112097.

Yang PF, et al. (2025) Multimodal Correspondence between Optogenetic fMRI, Electrophysiology, and Anatomical Maps of the Secondary Somatosensory Cortex in Nonhuman Primates. The Journal of neuroscience : the official journal of the Society for Neuroscience, 45(21).

Silbaugh A, et al. (2025) Cerebellar climbing fibers impact experience-dependent plasticity in the mouse primary somatosensory cortex. bioRxiv : the preprint server for biology.

Sehgal M, et al. (2025) Compartmentalized dendritic plasticity in the mouse retrosplenial cortex links contextual memories formed close in time. Nature neuroscience, 28(3), 602.

Aukema RJ, et al. (2025) A network of basolateral amygdala projection neurons contributes to stress-induced activation of the hypothalamic-pituitary-adrenal axis. Science advances, 11(45), eadv3737.

Chen Y, et al. (2025) WISDEM: a hybrid wireless integrated sensing detector for simultaneous EEG and MRI. Nature methods, 22(9), 1944.

Alberquilla S, et al. (2025) Astrocytes Mediate Psychostimulant-Induced Alterations of Spike-Timing Dependent Synaptic Plasticity. Glia, 73(5), 1051.

Chouvaeff M, et al. (2025) A top-down control of stress-induced REM sleep shortening. *Current biology : CB*, 35(17), 4151.

Ollivier M, et al. (2024) Crym-positive striatal astrocytes gate perseverative behaviour. *Nature*, 627(8003), 358.

Chintalacheruvu N, et al. (2024) A cortical locus for modulation of arousal states. *bioRxiv : the preprint server for biology*.

Yao J, et al. (2024) Prefrontal projections modulate recurrent circuitry in the insular cortex to support short-term memory. *Cell reports*, 43(2), 113756.

Silva NT, et al. (2024) Climbing fibers provide essential instructive signals for associative learning. *Nature neuroscience*, 27(5), 940.

Cao Z, et al. (2024) Distinct populations of lateral preoptic nucleus neurons jointly contribute to depressive-like behaviors through divergent projections in male mice. *Neurobiology of stress*, 32, 100667.

Okamoto K, et al. (2023) Specific AAV2/PHP.eB-mediated gene transduction of CA2 pyramidal cells via injection into the lateral ventricle. *Scientific reports*, 13(1), 323.