

Resource Summary Report

Generated by [NIF](#) on Jul 29, 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: 20260725T074513+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 36 mentions in open access literature.

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

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

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.

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

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

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.

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).

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.

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

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

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

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

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.

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

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

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.

Okujeni S, et al. (2023) Structural Modularity Tunes Mesoscale Criticality in Biological Neuronal Networks. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 43(14), 2515.

Veres JM, et al. (2023) CaMKII γ Promoter-Controlled Circuit Manipulations Target Both Pyramidal Cells and Inhibitory Interneurons in Cortical Networks. *eNeuro*, 10(4).

Keary KM, et al. (2023) Dendritic distribution of autophagosomes underlies pathway-selective induction of LTD. *Cell reports*, 42(8), 112898.

Fukui K, et al. (2022) Estrogen signaling modulates behavioral selection toward pups and amygdalohippocampal area in the rhomboid nucleus of the bed nucleus of the stria terminalis circuit. *Neuropharmacology*, 204, 108879.