

Resource Summary Report

Generated by [NIF](#) on Aug 25, 2026

pACAGW-ChR2-Venus-AAV

RRID:Addgene_20071

Type: Plasmid

Proper Citation

RRID:Addgene_20071

Plasmid Information

URL: <http://www.addgene.org/20071>

Proper Citation: RRID:Addgene_20071

Insert Name: Channelrhodopsin-2

Organism: Chlamydomonas reinhardtii

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:19151697](#)

Vector Backbone Description: Backbone Size:3824; Vector Backbone:N/A; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Plasmid Name: pACAGW-ChR2-Venus-AAV

Record Creation Time: 20220422T222049+0000

Record Last Update: 20260815T081151+0000

Ratings and Alerts

No rating or validation information has been found for pACAGW-ChR2-Venus-AAV.

No alerts have been found for pACAGW-ChR2-Venus-AAV.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 29 mentions in open access literature.

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

Miller-Hansen AJ, et al. (2022) Conserved patterns of functional organization between cortex and thalamus in mice. *Proceedings of the National Academy of Sciences of the United States of America*, 119(21), e2201481119.

Young H, et al. (2021) Laminar-specific cortico-cortical loops in mouse visual cortex. *eLife*, 10.

Dacre J, et al. (2021) A cerebellar-thalamocortical pathway drives behavioral context-dependent movement initiation. *Neuron*, 109(14), 2326.

Wang Y, et al. (2021) A long-range, recurrent neuronal network linking the emotion regions with the somatic motor cortex. *Cell reports*, 36(12), 109733.

Cheriyian J, et al. (2020) Peripheral nerve injury reduces the excitation-inhibition balance of basolateral amygdala inputs to prelimbic pyramidal neurons projecting to the periaqueductal gray. *Molecular brain*, 13(1), 100.

Tanimura A, et al. (2019) Cholinergic Interneurons Amplify Thalamostriatal Excitation of Striatal Indirect Pathway Neurons in Parkinson's Disease Models. *Neuron*, 101(3), 444.

Ito W, et al. (2019) Prefrontal-amygdala plasticity enabled by observational fear. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 44(10), 1778.

Li X, et al. (2018) Scaling of Optogenetically Evoked Signaling in a Higher-Order Corticocortical Pathway in the Anesthetized Mouse. *Frontiers in systems neuroscience*, 12, 16.

Wuttke TV, et al. (2018) Developmentally primed cortical neurons maintain fidelity of differentiation and establish appropriate functional connectivity after transplantation. *Nature neuroscience*, 21(4), 517.

Kozuka T, et al. (2017) The TRPM1 Channel Is Required for Development of the Rod ON Bipolar Cell-All Amacrine Cell Pathway in the Retinal Circuit. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 37(41), 9889.

Zhang CL, et al. (2017) Protein Kinase A Deregulation in the Medial Prefrontal Cortex Impairs Working Memory in Murine Oligophrenin-1 Deficiency. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 37(46), 11114.

Neumann PA, et al. (2016) Cocaine-Induced Synaptic Alterations in Thalamus to Nucleus Accumbens Projection. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 41(9), 2399.

Cheriyian J, et al. (2016) Specific Targeting of the Basolateral Amygdala to Projectionally Defined Pyramidal Neurons in Prelimbic and Infralimbic Cortex. *eNeuro*, 3(2).

Zhang CL, et al. (2015) The hippocampo-amygdala control of contextual fear expression is affected in a model of intellectual disability. *Brain structure & function*, 220(6), 3673.

Suter BA, et al. (2015) Reciprocal interareal connections to corticospinal neurons in mouse M1 and S2. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 35(7), 2959.

Hooks BM, et al. (2015) Dual-channel circuit mapping reveals sensorimotor convergence in the primary motor cortex. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 35(10), 4418.

Dubos A, et al. (2015) Conditional depletion of intellectual disability and Parkinsonism candidate gene *ATP6AP2* in fly and mouse induces cognitive impairment and neurodegeneration. *Human molecular genetics*, 24(23), 6736.

Ito W, et al. (2015) Observation of Distressed Conspecific as a Model of Emotional Trauma Generates Silent Synapses in the Prefrontal-Amygdala Pathway and Enhances Fear Learning, but Ketamine Abolishes those Effects. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 40(11), 2536.

Gonzalez-Sulser A, et al. (2014) GABAergic projections from the medial septum selectively inhibit interneurons in the medial entorhinal cortex. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 34(50), 16739.

Ishikawa M, et al. (2013) Dopamine triggers heterosynaptic plasticity. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 33(16), 6759.