

Resource Summary Report

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

pAAV CAG Chr2 E123T T159C 2A tDimer

RRID:Addgene_85399

Type: Plasmid

Proper Citation

RRID:Addgene_85399

Plasmid Information

URL: <http://www.addgene.org/85399>

Proper Citation: RRID:Addgene_85399

Insert Name: Channelrhodopsin-2

Organism: Chlamydomonas

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21504945](#)

Vector Backbone Description: Backbone Marker:Stratagene; Backbone Size:5802; Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: Layer-specific optogenetic activation of pyramidal neurons causes beta-gamma entrainment of neonatal networks. Nat Commun. 2017 Feb 20;8:14563. doi: 10.1038/ncomms14563. Bitzenhofer SH1, Ahlbeck J1, Wolff A1, Wiegert JS2, Gee CE2, Oertner TG2, Hanganu-Opatz IL1.

Plasmid Name: pAAV CAG Chr2 E123T T159C 2A tDimer

Relevant Mutation: E123T , T159C

Record Creation Time: 20220422T222549+0000

Record Last Update: 20260815T082128+0000

Ratings and Alerts

No rating or validation information has been found for pAAV CAG Chr2 E123T T159C 2A tDimer.

No alerts have been found for pAAV CAG ChR2 E123T T159C 2A tDimer.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 3 mentions in open access literature.

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

Baumann N, et al. (2025) Cell-extrinsic controls over neocortical neuron fate and diversity. Science advances, 11(38), eadw0218.

Bitzenhofer SH, et al. (2021) A transient developmental increase in prefrontal activity alters network maturation and causes cognitive dysfunction in adult mice. Neuron, 109(8), 1350.

Bitzenhofer SH, et al. (2017) Layer-specific optogenetic activation of pyramidal neurons causes beta-gamma entrainment of neonatal networks. Nature communications, 8, 14563.