

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 19, 2026

pAAV-CaMKIIa-oChIEF(E163A/T199C)-P2A-mKate2

RRID:Addgene_51092

Type: Plasmid

Proper Citation

RRID:Addgene_51092

Plasmid Information

URL: <http://www.addgene.org/51092>

Proper Citation: RRID:Addgene_51092

Insert Name: oChIEF(E163A/T199C)

Organism: Synthetic

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:custom; Backbone Size:5100; Vector Backbone:pAAV-CaMKIIa-WPRE-HGHpA; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: The addition of the E163A and T199C mutations in oChIEF impart higher photocurrent amplitude while retaining fast kinetic properties. This variant is proposed as an alternative to ChETA variants that exhibit smaller photocurrents and more toxicity.

Plasmid Name: pAAV-CaMKIIa-oChIEF(E163A/T199C)-P2A-mKate2

Relevant Mutation: E163A/T199C

Record Creation Time: 20220422T222301+0000

Record Last Update: 20260815T081614+0000

Ratings and Alerts

No rating or validation information has been found for pAAV-CaMKIIa-oChIEF(E163A/T199C)-P2A-mKate2.

No alerts have been found for pAAV-CaMKIIa-oChIEF(E163A/T199C)-P2A-mKate2.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Zhang Y, et al. (2022) Targeting thalamic circuits rescues motor and mood deficits in PD mice. Nature, 607(7918), 321.