

Resource Summary Report

Generated by [dkNET](#) on Sep 2, 2026

AAV-CaMKIIa-GCaMP6f-P2A-nls-dTomato

RRID:Addgene_51087

Type: Plasmid

Proper Citation

RRID:Addgene_51087

Plasmid Information

URL: <http://www.addgene.org/51087>

Proper Citation: RRID:Addgene_51087

Insert Name: GCaMP6f

Organism: Synthetic

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:custom; Backbone Size:5095; Vector Backbone:pAAV-CaMKIIa-WPRE-BGHpA; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: The addition of the P2A-nls-dTomato allows for easy identification of GCaMP6 expressing cells exhibiting nuclear red fluorescence that does not significantly overlap with the cytosolic GCaMP signal. The GCaMP and fluorophore are physically uncoupled. Permissions were obtained from Douglas Kim and the Clontech licensing office for depositing this new plasmid.

Plasmid Name: AAV-CaMKIIa-GCaMP6f-P2A-nls-dTomato

Record Creation Time: 20220422T222301+0000

Record Last Update: 20260902T045627+0000

Ratings and Alerts

No rating or validation information has been found for AAV-CaMKIIa-GCaMP6f-P2A-nls-dTomato.

No alerts have been found for AAV-CaMKIIa-GCaMP6f-P2A-nls-dTomato.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Baek SJ, et al. (2022) VTA-projecting cerebellar neurons mediate stress-dependent depression-like behaviors. *eLife*, 11.

Rhee JK, et al. (2021) Projection-dependent heterogeneity of cerebellar granule cell calcium responses. *Molecular brain*, 14(1), 63.

Bedbrook CN, et al. (2019) Machine learning-guided channelrhodopsin engineering enables minimally invasive optogenetics. *Nature methods*, 16(11), 1176.

Park H, et al. (2019) Inputs from Sequentially Developed Parallel Fibers Are Required for Cerebellar Organization. *Cell reports*, 28(11), 2939.

Vagner T, et al. (2016) Systemic application of AAV vectors targeting GFAP-expressing astrocytes in Z-Q175-KI Huntington's disease mice. *Molecular and cellular neurosciences*, 77, 76.

Dimidschstein J, et al. (2016) A viral strategy for targeting and manipulating interneurons across vertebrate species. *Nature neuroscience*, 19(12), 1743.