

Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

AAV-EF1a-DIO-GCaMP6s-P2A-nls-dTomato

RRID:Addgene_51082

Type: Plasmid

Proper Citation

RRID:Addgene_51082

Plasmid Information

URL: <http://www.addgene.org/51082>

Proper Citation: RRID:Addgene_51082

Insert Name: GCaMP6s

Organism: Synthetic

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:custom; Backbone Size:5320; Vector Backbone:pAAV-EF1a-DIO-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-EF1a-DIO-GCaMP6s-P2A-nls-dTomato

Record Creation Time: 20220422T222301+0000

Record Last Update: 20260815T081614+0000

Ratings and Alerts

No rating or validation information has been found for AAV-EF1a-DIO-GCaMP6s-P2A-nls-dTomato.

No alerts have been found for AAV-EF1a-DIO-GCaMP6s-P2A-nls-dTomato.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 10 mentions in open access literature.

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

Weinreb C, et al. (2026) Spontaneous behavior is a succession of self-directed tasks. *Neuron*, 114(5), 922.

Carta I, et al. (2025) Sex-specific hypothalamic neural projection activity drives caregiving in mice. *Nature communications*, 16(1), 4116.

Kim B, et al. (2025) Dopamine D2 receptor modulation of insulin receptor signaling in the central amygdala: implications for compulsive-like eating behavior. *Molecular psychiatry*.

Printz Y, et al. (2023) Determinants of functional synaptic connectivity among amygdala-projecting prefrontal cortical neurons in male mice. *Nature communications*, 14(1), 1667.

Madar J, et al. (2023) Piezo2 regulates colonic mechanical sensitivity in a sex specific manner in mice. *Nature communications*, 14(1), 2158.

Hu HT, et al. (2023) Autism-related KLHL17 and SYNPO act in concert to control activity-dependent dendritic spine enlargement and the spine apparatus. *PLoS biology*, 21(8), e3002274.

Hassan SI, et al. (2023) Social odor discrimination and its enhancement by associative learning in the hippocampal CA2 region. *Neuron*, 111(14), 2232.

Duan ZRS, et al. (2020) GABAergic Restriction of Network Dynamics Regulates Interneuron Survival in the Developing Cortex. *Neuron*, 105(1), 75.

Guerin K, et al. (2020) A Novel Next-Generation Sequencing and Analysis Platform to Assess the Identity of Recombinant Adeno-Associated Viral Preparations from Viral DNA Extracts. *Human gene therapy*, 31(11-12), 664.

Markowitz JE, et al. (2018) The Striatum Organizes 3D Behavior via Moment-to-Moment Action Selection. *Cell*, 174(1), 44.