

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

pAAV.Syn.NES-jRGECO1a.WPRE.SV40

RRID:Addgene_100854

Type: Plasmid

Proper Citation

RRID:Addgene_100854

Plasmid Information

URL: <http://www.addgene.org/100854>

Proper Citation: RRID:Addgene_100854

Insert Name: jRGECO1a

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:27011354](#)

Vector Backbone Description: Vector Backbone:pAAV; Vector Types:Mammalian Expression, AAV; Bacterial Resistance:Ampicillin

Comments: This plasmid was previously available as pAAV.Syn.NES-jRGECO1a.WPRE.SV40(p3849) from the Penn Vector Core. This plasmid was created as part of the GENIE project at Janelia Research Campus.

Plasmid Name: pAAV.Syn.NES-jRGECO1a.WPRE.SV40

Record Creation Time: 20220422T221450+0000

Record Last Update: 20260808T080307+0000

Ratings and Alerts

No rating or validation information has been found for pAAV.Syn.NES-jRGECO1a.WPRE.SV40.

No alerts have been found for pAAV.Syn.NES-jRGECO1a.WPRE.SV40.

Data and Source Information

Usage and Citation Metrics

We found 52 mentions in open access literature.

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

Lu S, et al. (2026) Astrocytes and neurons exhibit partially shared but distinct composite receptive fields for natural stimuli. *Journal of neurophysiology*, 135(2), 382.

Yan Y, et al. (2026) Genetically encoded assembly recorder temporally resolves cellular history. *Nature*, 652(8111), 1049.

Aymard P, et al. (2026) Graph-based analysis of volumetric image data reveals predominant layer Va-to-II/III feedback in mouse motor cortex. *Cell reports*, 45(7), 117618.

Estrada Berlanga A, et al. (2026) Fast and accessible morphology-free functional fluorescence imaging analysis. *PLoS computational biology*, 22(3), e1014038.

Rajan R, et al. (2026) Visual experience exerts an instructive role on cortical feedback inputs to the primary visual cortex. *Current biology : CB*, 36(4), 1033.

Furuyama T, et al. (2026) Noise-evoked dopamine dynamics in the nucleus accumbens and tail of the striatum. *iScience*, 29(5), 115789.

Huang JY, et al. (2025) From initial formation to developmental refinement: GABAergic inputs shape neuronal subnetworks in the primary somatosensory cortex. *iScience*, 28(3), 112104.

Omidi S, et al. (2025) Pathway-like Activation of 3D Neuronal Constructs with an Optical Interface. *Biosensors*, 15(3).

Wang W, et al. (2025) Hydrogen-bonded organic framework nanotransducers enabled sono-optogenetics for Parkinsonian rats. *bioRxiv : the preprint server for biology*.

Gore PS, et al. (2025) Red-shifted excitation enhances the sensitivity of red genetically encoded Ca²⁺ indicator and enables crosstalk-free two-photon holographic optophysiology. *Journal of biomedical optics*, 30(11), 116003.

Athanassi A, et al. (2025) Optimized workflow for behavior-coupled fiber photometry experiment: improved data navigation and accessibility. *Frontiers in neuroscience*, 19, 1601127.

Dalir L, et al. (2025) Cell-generated mechanical forces play a role in epileptogenesis after injury. *bioRxiv : the preprint server for biology*.

Vargas-Ortiz J, et al. (2025) Translaminar synchronous neuronal activity is required for columnar synaptic strengthening in the mouse neocortex. *Nature communications*, 16(1), 1296.

Corbit VL, et al. (2025) Dissociable roles of central striatum and anterior lateral motor area in initiating and sustaining naturalistic behavior. *Cell reports*, 44(1), 115181.

Xin Q, et al. (2025) Neuron-astrocyte coupling in lateral habenula mediates depressive-like behaviors. *Cell*, 188(12), 3291.

Goltstein PM, et al. (2025) A column-like organization for ocular dominance in mouse visual cortex. *Nature communications*, 16(1), 1926.

Nguyen QA, et al. (2024) Acetylcholine receptor based chemogenetics engineered for neuronal inhibition and seizure control assessed in mice. *Nature communications*, 15(1), 601.

Suthard RL, et al. (2024) Engram reactivation mimics cellular signatures of fear. *Cell reports*, 43(3), 113850.

Niraula S, et al. (2024) Amyloid Pathology Impairs Experience-Dependent Inhibitory Synaptic Plasticity. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 44(5).

Osaki T, et al. (2024) Early differential impact of MeCP2 mutations on functional networks in Rett syndrome patient-derived human cerebral organoids. *bioRxiv : the preprint server for biology*.