

Resource Summary Report

Generated by [dkNET](#) on Jul 28, 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: 20260725T073339+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 46 mentions in open access literature.

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

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).

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.

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

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

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.

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.

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

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).

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

Dias RF, et al. (2024) Visual experience reduces the spatial redundancy between cortical feedback inputs and primary visual cortex neurons. *Neuron*, 112(19), 3329.

Celinskis D, et al. (2024) Toward a brighter constellation: multiorgan neuroimaging of neural and vascular dynamics in the spinal cord and brain. *Neurophotonics*, 11(2), 024209.

Tetzlaff SK, et al. (2024) Characterizing and targeting glioblastoma neuron-tumor networks with retrograde tracing. *Cell*.

Frechou MA, et al. (2024) Adult neurogenesis improves spatial information encoding in the mouse hippocampus. *Nature communications*, 15(1), 6410.

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*.

Gardner PM, et al. (2024) Coexistence of state, choice, and sensory integration coding in barrel cortex LII/III. *Nature communications*, 15(1), 4782.

Shigetomi E, et al. (2024) Disease-relevant upregulation of P2Y1 receptor in astrocytes enhances neuronal excitability via IGFBP2. *Nature communications*, 15(1), 6525.