

Resource Summary Report

Generated by [PRECISE-TBI](#) on Jul 29, 2026

pAAV.Syn.NES-jRCaMP1b.WPRE.SV40

RRID:Addgene_100851

Type: Plasmid

Proper Citation

RRID:Addgene_100851

Plasmid Information

URL: <http://www.addgene.org/100851>

Proper Citation: RRID:Addgene_100851

Insert Name: jRCaMP1b

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-jRCaMP1b.WPRE.SV40 (p3852)) from the Penn Vector Core. This plasmid was created as part of the GENIE project at Janelia Research Campus.

Plasmid Name: pAAV.Syn.NES-jRCaMP1b.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-jRCaMP1b.WPRE.SV40.

No alerts have been found for pAAV.Syn.NES-jRCaMP1b.WPRE.SV40.

Data and Source Information

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Papanikolaou A, et al. (2025) Selectively vulnerable deep cortical layer 5/6 fast-spiking interneurons in Alzheimer's disease models in vivo. *Neuron*, 113(14), 2265.

Zhao X, et al. (2025) Alzheimer's disease protective allele of Clusterin modulates neuronal excitability through lipid-droplet-mediated neuron-glia communication. *Molecular neurodegeneration*, 20(1), 51.

Harris SS, et al. (2025) The amyloid precursor family of proteins in excitatory neurons are essential for regulating cortico-hippocampal circuit dynamics in vivo. *Cell reports*, 44(6), 115801.

Hanauske T, et al. (2025) Electrophysiologically calibrated optogenetic stimulation of dentate granule cells mitigates dendritic spine loss in denervated organotypic entorhino-hippocampal slice cultures. *Scientific reports*, 15(1), 4563.

Riggs LM, et al. (2025) Bioactive ketamine metabolite exerts in vivo neuroplastogenic effects to improve hippocampal function in a treatment-resistant depression model. *Cell reports*, 44(6), 115743.

Almeida Rojo AL, et al. (2025) Nucleus accumbens dynamics in food reward seeking and regulation by sleep. *Translational psychiatry*, 15(1), 219.

Groschup B, et al. (2024) Probing intracellular potassium dynamics in neurons with the genetically encoded sensor I_c-LysM GEPII 1.0 in vitro and in vivo. *Scientific reports*, 14(1), 13753.

Zhao X, et al. (2024) Alzheimer's disease protective allele of Clusterin modulates neuronal excitability through lipid-droplet-mediated neuron-glia communication. *medRxiv : the preprint server for health sciences*.

Kawata S, et al. (2022) Green fluorescent cAMP indicator of high speed and specificity suitable for neuronal live-cell imaging. *Proceedings of the National Academy of Sciences of the United States of America*, 119(28), e2122618119.

Santa Cruz Garcia AB, et al. (2022) Gasdermin D pores are dynamically regulated by local phosphoinositide circuitry. *Nature communications*, 13(1), 52.

Jørgensen AB, et al. (2022) μ -Opioid Receptor Activation Reduces Glutamate Release in the preBötzing Complex in Organotypic Slice Cultures. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 42(43), 8066.

Wong Fong Sang IE, et al. (2021) Optogenetically Controlled Activity Pattern Determines Survival Rate of Developing Neocortical Neurons. *International journal of molecular*

sciences, 22(12).

Hamodi AS, et al. (2020) Transverse sinus injections drive robust whole-brain expression of transgenes. *eLife*, 9.

Gribizis A, et al. (2019) Visual Cortex Gains Independence from Peripheral Drive before Eye Opening. *Neuron*, 104(4), 711.