

Resource Summary Report

Generated by [RRID](#) on Aug 26, 2026

pAAV.hSyn.Flex.iGluSnFr.WPRE.SV40

RRID:Addgene_98931

Type: Plasmid

Proper Citation

RRID:Addgene_98931

Plasmid Information

URL: <http://www.addgene.org/98931>

Proper Citation: RRID:Addgene_98931

Insert Name: iGluSnFr

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:23314171](#)

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

Comments: Penn Vector Core PV2724. Biosensor iGluSnFRa is a single-wavelength glutamate sensor constructed from E. coli Glut and cpGFP. iGluSnFR is bright and photostable, with 4.5 (F/F)_{max} in vitro, under both 1- and 2-photon illumination. These iGluSnFR constructs contain a K158R (GFP numbering) mutation that is not referenced in the publication. Depositing lab has confirmed that this mutation is expected and that the plasmids function as described. ** A newer version of this sensor is available. Please see iGluSnFR3 plasmids at <https://www.addgene.org/browse/article/28220233/> **

Plasmid Name: pAAV.hSyn.Flex.iGluSnFr.WPRE.SV40

Record Creation Time: 20220422T222632+0000

Record Last Update: 20260815T082241+0000

Ratings and Alerts

No rating or validation information has been found for pAAV.hSyn.Flex.iGluSnFr.WPRE.SV40 .

No alerts have been found for pAAV.hSyn.Flex.iGluSnFr.WPRE.SV40 .

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Brymer KJ, et al. (2023) Asymmetric dysregulation of glutamate dynamics across the synaptic cleft in a mouse model of Alzheimer's disease. *Acta neuropathologica communications*, 11(1), 27.

Gaynes JA, et al. (2023) Heterogeneous presynaptic receptive fields contribute to directional tuning in starburst amacrine cells. *eLife*, 12.

Gaynes JA, et al. (2023) Heterogeneous presynaptic receptive fields contribute to directional tuning in starburst amacrine cells. *bioRxiv* : the preprint server for biology.

Srivastava P, et al. (2022) Spatiotemporal properties of glutamate input support direction selectivity in the dendrites of retinal starburst amacrine cells. *eLife*, 11.

Gaynes JA, et al. (2022) Classical center-surround receptive fields facilitate novel object detection in retinal bipolar cells. *Nature communications*, 13(1), 5575.