

Resource Summary Report

Generated by [RRID](#) on Aug 19, 2026

ArcLight-A242

RRID:Addgene_36857

Type: Plasmid

Proper Citation

RRID:Addgene_36857

Plasmid Information

URL: <http://www.addgene.org/36857>

Proper Citation: RRID:Addgene_36857

Insert Name: fluorescent protein voltage sensor

Organism: Ciona intestinalis

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:22958819](#)

Vector Backbone Description: Backbone Size:5694; Vector Backbone:pCS2+; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: <http://www.fluorogenetic-voltage-sensors.org/> This construct is composed of the S1-4 domain of the CiVSP voltage sensor. Super ecliptic pHluorin is inserted at position A242 in the CiVSP sequence.

Plasmid Name: ArcLight-A242

Relevant Mutation: Ci-VSP contains R217Q mutation; super ecliptic pHluorin contains A227D mutation

Record Creation Time: 20220422T222156+0000

Record Last Update: 20260815T081411+0000

Ratings and Alerts

No rating or validation information has been found for ArcLight-A242.

No alerts have been found for ArcLight-A242.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 7 mentions in open access literature.

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

Obeng B, et al. (2023) Pharmaceutical agent cetylpyridinium chloride inhibits immune mast cell function by interfering with calcium mobilization. Food and chemical toxicology : an international journal published for the British Industrial Biological Research Association, 179, 113980.

Obeng B, et al. (2023) Pharmaceutical agent cetylpyridinium chloride inhibits immune mast cell function by interfering with calcium mobilization. bioRxiv : the preprint server for biology.

Bloxham B, et al. (2021) Linearly polarized excitation enhances signals from fluorescent voltage indicators. Biophysical journal, 120(23), 5333.

Sangroula S, et al. (2020) Triclosan disrupts immune cell function by depressing Ca²⁺ influx following acidification of the cytoplasm. Toxicology and applied pharmacology, 405, 115205.

Papp F, et al. (2019) TMEM266 is a functional voltage sensor regulated by extracellular Zn²⁺. eLife, 8.

Kuppusamy KT, et al. (2015) Let-7 family of microRNA is required for maturation and adult-like metabolism in stem cell-derived cardiomyocytes. Proceedings of the National Academy of Sciences of the United States of America, 112(21), E2785.

Leyton-Mange JS, et al. (2014) Rapid cellular phenotyping of human pluripotent stem cell-derived cardiomyocytes using a genetically encoded fluorescent voltage sensor. Stem cell reports, 2(2), 163.