

Resource Summary Report

Generated by [dkNET](#) on Aug 17, 2026

pcDNA3-AKAR2-CR

RRID:Addgene_40255

Type: Plasmid

Proper Citation

RRID:Addgene_40255

Plasmid Information

URL: <http://www.addgene.org/40255>

Proper Citation: RRID:Addgene_40255

Insert Name: AKAR2

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:22961245](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5489; Vector Backbone:pcDNA3; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: ECFP was replaced with GFP Clover and Citrine was replaced with RFP mRuby2. Note: there is a small sequence insertion downstream of the insert that adds restriction sites. This is not present in the full plasmids sequence, so please refer to Addgene's QC sequence with the BGH-Rev primer for additional information.

Plasmid Name: pcDNA3-AKAR2-CR

Record Creation Time: 20220422T222209+0000

Record Last Update: 20260815T081435+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA3-AKAR2-CR.

No alerts have been found for pcDNA3-AKAR2-CR.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 9 mentions in open access literature.

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

Anjum R, et al. (2024) Rem2 interacts with CaMKII at synapses and restricts long-term potentiation in hippocampus. bioRxiv : the preprint server for biology.

Maeda Y, et al. (2023) Differential cell-cycle control by oscillatory versus sustained Hes1 expression via p21. Cell reports, 42(5), 112520.

Shibata ACE, et al. (2021) Photoactivatable CaMKII induces synaptic plasticity in single synapses. Nature communications, 12(1), 751.

Zhang JZ, et al. (2020) Phase Separation of a PKA Regulatory Subunit Controls cAMP Compartmentation and Oncogenic Signaling. Cell, 182(6), 1531.

Murakoshi H, et al. (2019) ShadowR: a novel chromoprotein with reduced non-specific binding and improved expression in living cells. Scientific reports, 9(1), 12072.

Mastop M, et al. (2017) Characterization of a spectrally diverse set of fluorescent proteins as FRET acceptors for mTurquoise2. Scientific reports, 7(1), 11999.

Nakahata Y, et al. (2016) Dual observation of the ATP-evoked small GTPase activation and Ca²⁺ transient in astrocytes using a dark red fluorescent protein. Scientific reports, 6, 39564.

Belgacem YH, et al. (2015) Inversion of Sonic hedgehog action on its canonical pathway by electrical activity. Proceedings of the National Academy of Sciences of the United States of America, 112(13), 4140.

Lesiak AJ, et al. (2015) RiboTag is a flexible tool for measuring the translational state of targeted cells in heterogeneous cell cultures. BioTechniques, 58(6), 308.