

Resource Summary Report

Generated by [RRID](#) on Aug 20, 2026

[CaV?2?1](#)

RRID:Addgene_26575

Type: Plasmid

Proper Citation

RRID:Addgene_26575

Plasmid Information

URL: <http://www.addgene.org/26575>

Proper Citation: RRID:Addgene_26575

Insert Name: Cacna2d1

Organism: Rattus norvegicus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:15201306](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5600; Vector Backbone:pcDNA3.1/Hygro; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: GENBANK #AF286488

Plasmid Name: CaV?2?1

Record Creation Time: 20220422T222119+0000

Record Last Update: 20260815T081254+0000

Ratings and Alerts

No rating or validation information has been found for CaV?2?1.

No alerts have been found for CaV?2?1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 27 mentions in open access literature.

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

Aguggia J, et al. (2024) Selective Colocalization of GHSR and GLP-1R in a Subset of Hypothalamic Neurons and Their Functional Interaction. *Endocrinology*, 166(1).

Trovò L, et al. (2024) Synaptotagmin-11 facilitates assembly of a presynaptic signaling complex in post-Golgi cargo vesicles. *EMBO reports*, 25(6), 2610.

Chin M, et al. (2024) The intracellular C-terminus confers compartment-specific targeting of voltage-gated calcium channels. *Cell reports*, 43(7), 114428.

Castro-Junior C, et al. (2023) α -Phonetoxins inhibit voltage-gated calcium CaV2.2 ion channel splice isoforms of dorsal root ganglia. *bioRxiv : the preprint server for biology*.

He LS, et al. (2023) Molecular tuning of sea anemone stinging. *eLife*, 12.

Chin M, et al. (2023) The intracellular C-terminus confers compartment-specific targeting of voltage-gated Ca²⁺ channels. *bioRxiv : the preprint server for biology*.

He LS, et al. (2023) Molecular tuning of sea anemone stinging. *bioRxiv : the preprint server for biology*.

Tan C, et al. (2022) Rebuilding essential active zone functions within a synapse. *Neuron*, 110(9), 1498.

Ojala KS, et al. (2021) A high-affinity, partial antagonist effect of 3,4-diaminopyridine mediates action potential broadening and enhancement of transmitter release at NMJs. *The Journal of biological chemistry*, 296, 100302.

Ferrante D, et al. (2021) PRRT2 modulates presynaptic Ca²⁺ influx by interacting with P/Q-type channels. *Cell reports*, 35(11), 109248.

Rodan LH, et al. (2021) Phenotypic expansion of CACNA1C-associated disorders to include isolated neurological manifestations. *Genetics in medicine : official journal of the American College of Medical Genetics*, 23(10), 1922.

Li B, et al. (2020) Ionomycin ameliorates hypophosphatasia via rescuing alkaline phosphatase deficiency-mediated L-type Ca²⁺ channel internalization in mesenchymal stem cells. *Bone research*, 8, 19.

Chen H, et al. (2020) Disruption of Cav1.2-mediated signaling is a pathway for ketamine-induced pathology. *Nature communications*, 11(1), 4328.

Martínez San Segundo P, et al. (2020) Outside-in regulation of the readily releasable pool of synaptic vesicles by α -1. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 34(1), 1362.

Weir K, et al. (2020) A molecular filter for the cnidarian stinging response. *eLife*, 9.

Held RG, et al. (2020) Synapse and Active Zone Assembly in the Absence of Presynaptic Ca²⁺ Channels and Ca²⁺ Entry. *Neuron*, 107(4), 667.

Heck J, et al. (2019) Transient Confinement of CaV2.1 Ca²⁺-Channel Splice Variants Shapes Synaptic Short-Term Plasticity. *Neuron*, 103(1), 66.

Yu S, et al. (2019) TAT-Modified α -Conotoxin MVIIA for Crossing the Blood-Brain Barrier. *Marine drugs*, 17(5).

Jiang X, et al. (2019) Both gain-of-function and loss-of-function de novo CACNA1A mutations cause severe developmental epileptic encephalopathies in the spectrum of Lennox-Gastaut syndrome. *Epilepsia*, 60(9), 1881.

Vierra NC, et al. (2019) Kv2.1 mediates spatial and functional coupling of L-type calcium channels and ryanodine receptors in mammalian neurons. *eLife*, 8.