

Resource Summary Report

Generated by [NIF](#) on Jul 30, 2026

huCaV2.2 (pSAD442-1)

RRID:Addgene_62574

Type: Plasmid

Proper Citation

RRID:Addgene_62574

Plasmid Information

URL: <http://www.addgene.org/62574>

Proper Citation: RRID:Addgene_62574

Insert Name: CACNA1B

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:25296916](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5100; Vector Backbone:pcDNA6/V5-HisA; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: contains alternate exons (+e10a, +18a, ??19a, +e31a, +e37b and +e46)
Note that the human CaV2.2 insert contains the native stop codon. The V5 and His tags present in the pcDNA6/V5-HisA backbone are NOT in frame with CaV2.2.

Plasmid Name: huCaV2.2 (pSAD442-1)

Record Creation Time: 20220422T222358+0000

Record Last Update: 20260725T074943+0000

Ratings and Alerts

No rating or validation information has been found for huCaV2.2 (pSAD442-1).

No alerts have been found for huCaV2.2 (pSAD442-1).

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 4 mentions in open access literature.

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

Dahimene S, et al. (2024) The Interplay Between Splicing of Two Exon Combinations Differentially Affects Membrane Targeting and Function of Human CaV2.2. *Function* (Oxford, England), 5(1), zqad060.

Nilsson M, et al. (2024) Voltage-dependent G-protein regulation of CaV2.2 (N-type) channels. *Science advances*, 10(37), eadp6665.

Xue Y, et al. (2022) Cav2.2-NFAT2-USP43 axis promotes invadopodia formation and breast cancer metastasis through cortactin stabilization. *Cell death & disease*, 13(9), 812.

Liu G, et al. (2020) Mechanism of adrenergic CaV1.2 stimulation revealed by proximity proteomics. *Nature*, 577(7792), 695.