

Anti-Cav3.1 Ca²⁺ channel [N178A/9.1] Standard Size Ab02146-23.0

Variable region sequences were determined by Dr. James Trimmer at the University of California, Davis, as supported by National Institutes of Health BRAIN Initiative award U24 NS109113.

This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rabbit IgG, Kappa

Clone Number: N178A/9.1

Alternative Name(s) of Target: N178A/9.1R; N178A/9; Voltage-dependent T-type calcium channel subunit alpha-1G; Voltage-gated calcium channel subunit alpha Cav3.1

UniProt Accession Number of Target Protein: O54898

Published Application(s): ICC, WB, IHC

Published Species Reactivity: Macaca fascicularis, Macaca mulatta, Rat, Human, Mouse

Immunogen: This antibody was raised by immunising BALB/c mice with a fusion protein amino acids 2052-2172 (cytoplasmic C-terminus) of mouse Cav3.1.

Specificity: This antibody is specific for the Cav3.1 Ca²⁺ channel. Voltage-sensitive calcium channels (VSCC) mediate the entry of calcium ions into excitable cells and are also involved in a variety of calcium-dependent processes

Application Notes: This antibody has been used for western blotting on proteins from the brain of mice (Calhoun et al, 2016; PMID:27112236) (Stoyas et al, 2020; PMID:31859031). Immunohistochemistry has also been performed on the mouse brain using this antibody (Stoyas et al, 2020; PMID:31859031). Immunohistochemistry was also performed on the retinas of both the Rhesus macaque and the crab-eating macaque (Puthussery et al, 2013; PMID:24107939).

Antibody First Published in: Puthussery et al. NaV1.1 Channels in Axon Initial Segments of Bipolar Cells Augment Input to Magnocellular Visual Pathways in the Primate Retina The Journal of Neuroscience, October 9, 2013 • 33(41):16045–16059 [PMID:24107939](#)

Note on publication: The article describes the research on initial axon segments in primate retinas

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.