

SCN4B Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP53322

Product Information

Application	WB
Primary Accession	<u>Q8IWT1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24969

Additional Information

Gene ID	6330
Other Names	Sodium channel subunit beta-4, SCN4B
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SCN4B (<u>HGNC:10592</u>)
Function	Regulatory subunit of multiple voltage-gated sodium (Nav) channels directly mediating the depolarization of excitable membranes. Navs, also called VGSCs (voltage-gated sodium channels) or VDSCs (voltage-dependent sodium channels), operate by switching between closed and open conformations depending on the voltage difference across the membrane. In the open conformation they allow Na(+) ions to selectively pass through the pore, along their electrochemical gradient. The influx of Na+ ions provokes membrane depolarization, initiating the propagation of electrical signals throughout cells and tissues. The accessory beta subunits participate in localization and functional modulation of the Nav channels (PubMed:24297919). Modulates the activity of SCN1A/Nav1.1 (PubMed:33712547). Modulates the activity of SCN2A/Nav1.2 (PubMed:24297919).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Expressed at a high level in dorsal root ganglia, at a lower level in brain, spinal cord, skeletal muscle and heart Expressed in the atrium.

Background

Modulates channel gating kinetics. Causes negative shifts in the voltage dependence of activation of certain alpha sodium channels, but does not affect the voltage dependence of inactivation. Modulates the suceptibility of the sodium channel to inhibition by toxic peptides from spider, scorpion, wasp and sea anemone venom.

References

Yu F.H.,et al.J. Neurosci. 23:7577-7585(2003). Taylor T.D.,et al.Nature 440:497-500(2006). Gilchrist J.,et al.Proc. Natl. Acad. Sci. U.S.A. 110:E5016-E5024(2013). Medeiros-Domingo A.,et al.Circulation 116:134-142(2007). Olesen M.S.,et al.Cardiovasc. Res. 89:786-793(2011).

Images



Anti-SCN4B Antibody at 1:1000 dilution + human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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