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Anti-SCN4B Antibody

Catalog # AP53322

Product Information

Application	WB, IHC
Primary Accession	Q8IWT1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24969

Additional Information

Gene ID	6330
Other Names	Sodium channel subunit beta-4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SCN4B. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

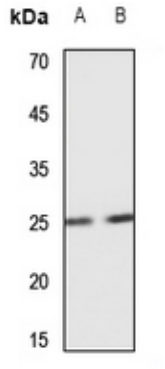
Name	SCN4B (HGNC:10592)
Function	Regulatory subunit of multiple voltage-gated sodium (Nav) channels directly mediating the depolarization of excitable membranes. Navs, also called VGSCs (voltage-gated sodium channels) or VDSCs (voltage-dependent sodium channels), operate by switching between closed and 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.

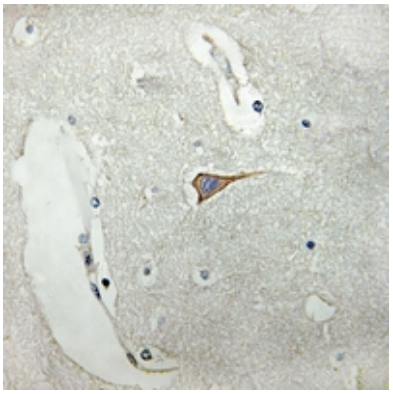
References

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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).
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Images



Western blot analysis of SCN4B expression in mouse kidney (A), mouse lung (B) whole cell lysates. (Predicted band size: 24 kD; Observed band size: 25 kD)



Immunohistochemical analysis of SCN4B staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.