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SCN3B antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11300

Product Information

Application	WB
Primary Accession	Q9NY72
Other Accession	NM_018400, NP_060870
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24702

Additional Information

Gene ID	55800
Alias Symbol	HSA243396, SCNB3
Other Names	Sodium channel subunit beta-3, SCN3B, KIAA1158
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-SCN3B antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	SCN3B antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

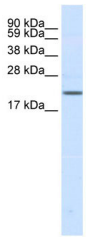
Name	SCN3B (HGNC:20665)
Synonyms	KIAA1158
Function	Regulatory subunit of multiple voltage-gated sodium (Nav) channels directly mediating the depolarization of excitable membranes. Navs, also called VGSCs (voltage-gated sodium channels) or VDSCs (voltage-dependent sodium channels), operate by switching 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:20558140, PubMed:21051419). Modulates the activity of SCN2A/Nav1.2, causing a hyperpolarizing shift in the voltage-dependence of inactivation of the channel and increasing the fraction of channels operating in the fast gating mode (By similarity). Modulates the activity of SCN5A/Nav1.5 (PubMed:20558140, PubMed:21051419, PubMed:24567321, PubMed:31950564). Could also regulate the atypical sodium channel SCN7A/Nav2.1 (PubMed:35301303). Modulates the activity of SCN10A/Nav1.8, regulating its oligomerization and accelerating the recovery from inactivation (PubMed:14975698).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Expressed in the atrium.

References

Kimura,K., et al., (2006) Genome Res. 16 (1), 55-65Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.Publications:Hu, D. et al. A mutation in the beta 3 subunit of the cardiac sodium channel associated with Brugada ECG phenotype. Circ. Cardiovasc. Genet. 2, 270-8 (2009). WB, Mouse, Human, H, Rabbit, Bovine, Rat, Dog, Guinea pig20031595Ho, C., Zhao, J., Malinowski, S., Chahine, M. & O'Leary, M. E. Differential expression of sodium channel β subunits in dorsal root ganglion sensory neurons. J. Biol. Chem. 287, 15044-53 (2012). WB, Mouse, Human, H, Rabbit, Bovine, Rat, Dog, Guinea pig22408255

Images



WB Suggested Anti-SCN3B Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:12500
Positive Control: Human brain