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Anti-SCN2B Antibody

Catalog # AP51861

Product Information

Application	WB
Primary Accession	O60939
Reactivity	Human, Mouse, Rat, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24326

Additional Information

Gene ID	6327
Other Names	Sodium channel subunit beta-2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SCN2B. The exact sequence is proprietary.
Dilution	WB~~ 1:1000
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	SCN2B (HGNC:10589)
Function	Regulatory subunit of multiple voltage-gated sodium (Nav) channels directly mediating the depolarization of excitable membranes (PubMed:19808477, PubMed:23559163, PubMed:26894959, PubMed:30765605, PubMed:30765606, PubMed:35277491, PubMed:36823201). 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 (PubMed:19808477, PubMed:23559163, PubMed:26894959). The accessory beta subunits participate in localization and functional modulation of the Nav channels (PubMed:19808477, PubMed:23559163). Modulates the activity of SCN1A/Nav1.1, SCN2A/Nav1.2, SCN2A/Nav1.3, SCN5A/Nav1.5, SCN8A/Nav1.6, SCN9A/Nav1.7 and SCN10A/Nav1.8 (PubMed:19808477, PubMed:23559163, PubMed:26894959, PubMed:30765605,

PubMed:30765606, PubMed:35277491, PubMed:36823201).

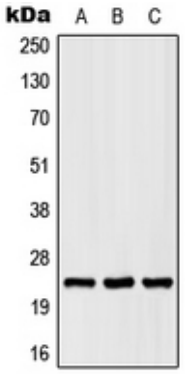
Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P54900}. Note=Clusters at the axon initial segment and node of Ranvier, the specialized neuronal subcellular domains involved in action potentials generation and propagation. {ECO:0000250|UniProtKB:P54900}

References

Eubanks J.,et al.NeuroReport 8:2775-2779(1997).
Bolino A.,et al.Eur. J. Hum. Genet. 6:629-634(1998).
Cruz J.S.,et al.Science 284:711-711(1999).
Isom L.L.,et al.Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).

Images



Western blot analysis of SCN2B expression in HEK293T (A), Raw264.7 (B), rat liver (C) whole cell lysates.
(Predicted band size: 24 kD; Observed band size: 24 kD)

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