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Na+ CP type IIβ Polyclonal Antibody

Catalog # AP71148

Product Information

Application	WB, E, IHC-P
Primary Accession	O60939
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24326

Additional Information

Gene ID	6327
Other Names	SCN2B; Sodium channel subunit beta-2
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. E~~N/A IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

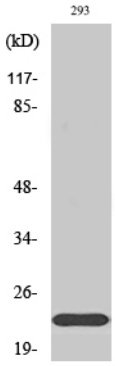
Name	SCN2B (HGNC:10589)
Function	Regulatory subunit of multiple voltage-gated sodium (Nav) channels directly mediating the depolarization of excitable membranes (PubMed:19808477, PubMed:23559163, PubMed:26894959, PubMed:30765605, PubMed:30765606, PubMed:35277491, PubMed:36823201). Navs, also called VGSCs (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}

Background

Crucial in the assembly, expression, and functional modulation of the heterotrimeric complex of the sodium channel. The subunit beta-2 causes an increase in the plasma membrane surface area and in its folding into microvilli. Interacts with TNR may play a crucial role in clustering and regulation of activity of sodium channels at nodes of Ranvier (By similarity).

Images



Western Blot analysis of various cells using Na+ CP type IIβ Polyclonal Antibody