

SCN1B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58489

Specification

SCN1B Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat
Host
Clonality
Calculated MW

Q07699
Rat
Rabbit
Polyclonal
24707

SCN1B Polyclonal Antibody - Additional Information

Gene ID 6324

Other Names

Sodium channel subunit beta-1, SCN1B

Dilution

```
<span class ="dilution_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution_IF">IF~~1:50~200</span><br \> <span class ="dilution_E">E~~N/A</span>
```

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

SCN1B Polyclonal Antibody - Protein Information

Name SCN1B (HGNC:10586)

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 (PubMed:14622265, PubMed:15525788, PubMed:18464934, PubMed:19710327, PubMed:<a



href="http://www.uniprot.org/citations/29992740" target=" blank">29992740, PubMed:36696443, PubMed:8125980, PubMed:8394762). The accessory beta subunits participate in localization and functional modulation of the Nav channels (PubMed:15525788, PubMed: 19710327, PubMed:29992740). Modulates the activity of SCN1A/Nav1.1, SCN2A/Nav1.2, SCN3A/Nav1.3, SCN4A/Nav1.4, SCN5A/Nav1.5, SCN8A/Nav1.6, SCN9A/Nav1.7 and SCN10A/Nav1.8 (PubMed:14622265, PubMed:15525788, PubMed:18464934, PubMed:30765606, PubMed:36696443, PubMed:8125980, PubMed:8394762).

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Perikaryon {ECO:0000250|UniProtKB:P97952} Cell projection {ECO:0000250|UniProtKB:P97952}. Cell projection, axon {ECO:0000250|UniProtKB:Q00954}. Note=Detected at nodes of Ranvier on the sciatic nerve. {ECO:0000250|UniProtKB:Q00954}

Tissue Location

The overall expression of isoform 1 and isoform 2 is very similar. Isoform 1 is abundantly expressed in skeletal muscle, heart and brain. Isoform 2 is highly expressed in brain and skeletal muscle and present at a very low level in heart, placenta, lung, liver, kidney and pancreas. In brain, isoform 2 is most abundant in the cerebellum, followed by the cerebral cortex and occipital lobe, while isoform 1 levels are higher in the cortex compared to the cerebellum Isoform 2 is expressed in many regions of the brain, including cerebellar Purkinje cells, cortex pyramidal neurons and many of the neuronal fibers throughout the brain (at protein level). Also detected in dorsal root ganglion, in fibers of the spinal nerve and in cortical neurons and their processes (at protein level)

SCN1B Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SCN1B Polyclonal Antibody - Images