

**SCN1B Antibody (N-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16369****Specification**

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**SCN1B Antibody (N-Terminus) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q07699</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25kDa KDa

**SCN1B Antibody (N-Terminus) - Additional Information****Gene ID** 6324**Other Names**

Sodium channel subunit beta-1, SCN1B

**Target/Specificity**

Human, mouse, rat. No cross reactivity with other proteins.

**Reconstitution & Storage**

Short term +4°C; Long term -20°C

**Precautions**

SCN1B Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**SCN1B Antibody (N-Terminus) - Protein Information****Name** SCN1B**Function**

Regulatory subunit of multiple voltage-gated sodium channel complexes that play important roles in excitable membranes in brain, heart and skeletal muscle. Enhances the presence of the pore-forming alpha subunit at the cell surface and modulates channel gating characteristics and the rate of channel inactivation. Modulates the activity of multiple pore-forming alpha subunits, such as SCN1A, SCN2A, SCN3A, SCN4A, SCN5A and SCN10A.

**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)

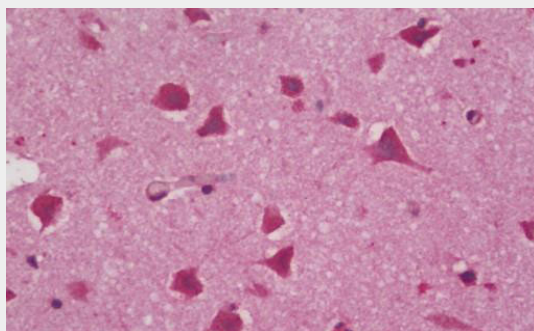
**Volume**

50 µl

**SCN1B Antibody (N-Terminus) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SCN1B Antibody (N-Terminus) - Images**

Human Brain, Cortex: Formalin-Fixed, Paraffin-Embedded (FFPE)

**SCN1B Antibody (N-Terminus) - Background**

Crucial in the assembly, expression, and functional modulation of the heterotrimeric complex of the sodium channel. The subunit beta-1 can modulate multiple alpha subunit isoforms from brain, skeletal muscle, and heart. Its association with neurofascin may target the sodium channels to the nodes of Ranvier of developing axons and retain these channels at the nodes in mature myelinated axons.

**SCN1B Antibody (N-Terminus) - References**

- McClatchey A.I., et al. Hum. Mol. Genet. 2:745-749(1993).  
Makita N., et al. J. Biol. Chem. 269:7571-7578(1994).  
Makita N., et al. Genomics 23:628-634(1994).  
Qin N., et al. Eur. J. Biochem. 270:4762-4770(2003).

Ota T.,et al.Nat. Genet. 36:40-45(2004).