

SCN1B Antibody (N-Term) Blocking Peptide
Synthetic peptide
Catalog # BP10645a**Specification**

SCN1B Antibody (N-Term) Blocking Peptide - Product Information

Primary Accession [Q07699](#)
Other Accession [NP_950238.1](#), [NP_001028.1](#)

SCN1B Antibody (N-Term) Blocking Peptide - Additional Information

Gene ID 6324

Other Names

Sodium channel subunit beta-1, SCN1B

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SCN1B Antibody (N-Term) Blocking Peptide - 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)

SCN1B Antibody (N-Term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SCN1B Antibody (N-Term) Blocking Peptide - Images

SCN1B Antibody (N-Term) Blocking Peptide - Background

Voltage-gated sodium channels are heteromeric proteins that function in the generation and propagation of action potentials in muscle and neuronal cells. They are composed of one alpha and two beta subunits, where the alpha subunit provides channel activity and the beta-1 subunit modulates the kinetics of channel inactivation. SCN1B encodes a sodium channel beta-1 subunit. Mutations in this gene result in generalized epilepsy with febrile seizures plus, Brugada syndrome 5, and defects in cardiac conduction. Multiple transcript variants encoding different isoforms have been found for this gene.

SCN1B Antibody (N-Term) Blocking Peptide - References

Grover, S., et al. Pharmacogenomics 11(7):927-941(2010) Tan, B.H., et al. Heart Rhythm 7(6):771-778(2010) Casini, S., et al. Cardiovasc. Res. 85(4):691-700(2010) Ogawa, R., et al. Int J Clin Pharmacol Ther 48(2):109-119(2010) Watanabe, H., et al. Circ Arrhythm Electrophysiol 2(3):268-275(2009)