10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SCN5A Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP18938a

Specification

SCN5A Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q14524

SCN5A Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 6331

Other Names
Sodium channel protein type 5 subunit alpha, HH1, Sodium channel protein cardiac muscle subunit alpha, Sodium channel protein type V subunit alpha, Voltage-gated sodium channel subunit alpha Nav15, SCN5A

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.

SCN5A Antibody (N-term) Blocking Peptide - Protein Information

Name SCN5A

Function
This protein mediates the voltage-dependent sodium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a sodium-selective channel through which Na(+) ions may pass in accordance with their electrochemical gradient (PubMed:1309946, PubMed:21447824, PubMed:25370050, PubMed:23420830, PubMed:23085483, PubMed:26279430, PubMed:26392562, PubMed:26776555). It is a tetrodotoxin-resistant Na(+) channel isoform (PubMed:1309946). This channel is responsible for the initial upstroke of the action potential. Channel inactivation is regulated by intracellular calcium levels (PubMed:<a href="http://www.uniprot.org/citations/19074138"

target="_blank">19074138).

Cellular Location
Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:D0E0C2}. Cytoplasm, perinuclear region. Cell membrane, sarcolemma, T- tubule {ECO:0000250|UniProtKB:P15389}. Cell junction {ECO:0000250|UniProtKB:P15389}. Note=RANGRF promotes trafficking to the cell membrane. Colocalizes with PKP2 at intercalated disks in the heart (By similarity). {ECO:0000250|UniProtKB:P15389, ECO:0000269|PubMed:21447824, ECO:0000269|PubMed:23420830}

Tissue Location
Found in jejunal circular smooth muscle cells (at protein level). Expressed in human atrial and ventricular cardiac muscle but not in adult skeletal muscle, brain, myometrium, liver, or spleen. Isoform 4 is expressed in brain.

SCN5A Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SCN5A Antibody (N-term) Blocking Peptide - Images

SCN5A Antibody (N-term) Blocking Peptide - Background

The protein encoded by this gene is an integral membraneprotein and tetrodotoxin-resistant voltage-gated sodium channelsubunit. This protein is found primarily in cardiac muscle and isresponsible for the initial upstroke of the action potential in anelectrocardiogram. Defects in this gene are a cause of long QTsyndrome type 3 (LQT3), an autosomal dominant cardiac disease.Alternative splicing results in several transcript variantsencoding different isoforms.

SCN5A Antibody (N-term) Blocking Peptide - References

Liu, M., et al. Circ. Res. 107(8):967-974(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)van Stuijvenberg, L., et al. DNA Cell Biol. 29(10):577-587(2010)House, C.D., et al. Cancer Res. 70(17):6957-6967(2010)Garcia-Castro, M., et al. Rev Esp Cardiol 63(7):856-859(2010)