

**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:<a href="http://www.uniprot.org/citations/1309946" target="\_blank">1309946</a>, PubMed:<a href="http://www.uniprot.org/citations/21447824" target="\_blank">21447824</a>, PubMed:<a href="http://www.uniprot.org/citations/25370050" target="\_blank">25370050</a>, PubMed:<a href="http://www.uniprot.org/citations/23420830" target="\_blank">23420830</a>, PubMed:<a href="http://www.uniprot.org/citations/23085483" target="\_blank">23085483</a>, PubMed:<a href="http://www.uniprot.org/citations/26279430" target="\_blank">26279430</a>, PubMed:<a href="http://www.uniprot.org/citations/26392562" target="\_blank">26392562</a>, PubMed:<a href="http://www.uniprot.org/citations/26776555" target="\_blank">26776555</a>). It is a tetrodotoxin-resistant Na(+) channel isoform (PubMed:<a href="http://www.uniprot.org/citations/1309946" target="\_blank">1309946</a>). 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</a>).

#### **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 membrane protein and tetrodotoxin-resistant voltage-gated sodium channel subunit. This protein is found primarily in cardiac muscle and is responsible for the initial upstroke of the action potential in an electrocardiogram. Defects in this gene are a cause of long QT syndrome type 3 (LQT3), an autosomal dominant cardiac disease. Alternative splicing results in several transcript variants encoding 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)