

SCN5A Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18938a**Specification**

SCN5A Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q14524
Other Accession	P15389 , Q9JIV9 , NP_000326.2
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	226940
Antigen Region	42-70

SCN5A Antibody (N-term) - 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

Target/Specificity

This SCN5A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 42-70 amino acids from the N-terminal region of human SCN5A.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SCN5A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SCN5A Antibody (N-term) - 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:[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

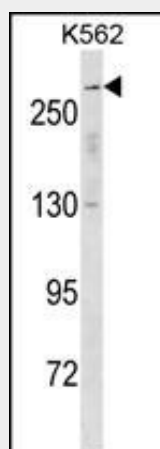
Found in jejunal circular smooth muscle cells (at protein level). Expressed in human atrial and ventricular cardiac muscle but not in adult skeletal muscle, brain, myometrium, liver, or spleen. Isoform 4 is expressed in brain.

SCN5A Antibody (N-term) - 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](#)

SCN5A Antibody (N-term) - Images



SCN5A Antibody (N-term) (Cat. #AP18938a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the SCN5A antibody detected the SCN5A protein (arrow).

SCN5A Antibody (N-term) - 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) - 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)