For Research Use Only

## SCN5A Monoclonal antibody, PBS Only



Catalog Number: 68273-1-PBS

**Basic Information** 

Catalog Number:

GenBank Accession Number: BC140813

**Purification Method:** 

68273-1-PBS

GeneID (NCBI):

Protein G purification

100ug, Concentration: 1mg/ml by

CloneNo.: 1C2B3

Nanodrop:

**UNIPROT ID:** Q14524 Full Name:

Mouse

sodium channel, voltage-gated, type

Isotype: lgG1

V. alpha subunit

Immunogen Catalog Number: AG19275

Calculated MW: 2016 aa, 227 kDa

Observed MW:

227 kDa

**Applications** 

**Tested Applications:** 

Indirect ELISA, IHC, WB

Species Specificity: rabbit, rat, mouse, human

**Background Information** 

Voltage-gated sodium channels are responsible for initiation and propagation of action potentials in the membranes of neurons and most electrically excitable cells (PMID: 10798388). These channels are composed of a large alpha subunit that forms the ion conduction pore and auxiliary beta subunits (PMID: 11486343). The alpha subunits form a gene family with at least 10 members. Nav1.5, encoded by the SCN5A gene in humans, is a pore forming alpha subunit of voltage-gated sodium channels. Nav1.5 is the principal Na+ channel isoform expressed in cardiomyocytes. Mutations in SCN5A gene have been linked to many cardiac electrical disorders, including the congenital and acquired long QT syndrome, Brugada syndrome, conduction slowing, sick sinus syndrome, atrial fibrillation, and dilated cardiomyopathy (PMID: 23123192).

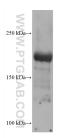
Storage

Storage:

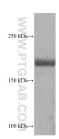
Store at -80°C. Storage Buffer:

PBS Only

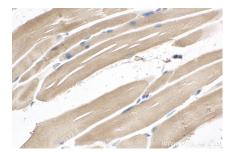
## Selected Validation Data



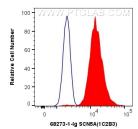
rabbit heart tissue were subjected to SDS PAGE followed by western blot with 68273-1-lg (SCN5A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68273-1-PBS in a different storage buffer formulation.



rat heart tissue were subjected to SDS PAGE followed by western blot with 68273-1-lg (SCN5A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 68273-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded mouse skeletal muscle tissue slide using 68273-1-Ig (SCN5A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 68273-1-PBS in a different storage buffer formulation.



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human SCN5A (68273-1-lg, Clone:1C2B3) and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-lg, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 68273-1-PBS in a

