

For Research Use Only

# Nav1.5 Polyclonal antibody

Catalog Number: 23016-1-AP

14 Publications



## Basic Information

### Catalog Number:

23016-1-AP

### Size:

750 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG19275

### GenBank Accession Number:

BC140813

### GeneID (NCBI):

6331

### UNIPROT ID:

Q14524

### Full Name:

sodium channel, voltage-gated, type V, alpha subunit

### Calculated MW:

2016 aa, 227 kDa

### Observed MW:

227 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:1000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat

### Positive Controls:

WB : mouse heart tissue,

IHC : mouse skeletal muscle tissue,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## 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<sup>+</sup> 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).

## Notable Publications

Author	Pubmed ID	Journal	Application
Ling-Ling Qian	34487812	Biochim Biophys Acta Mol Basis Dis	WB
Gang Yu	30282806	J Biol Chem	WB
Kuang-Yung Lee	35567413	Hum Mol Genet	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

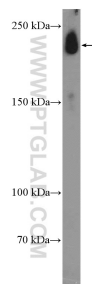
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

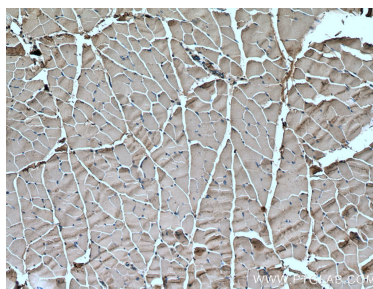
W: [ptgcn.com](http://ptgcn.com)

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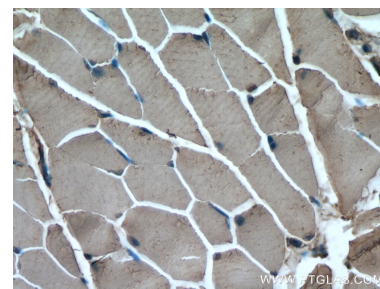
## Selected Validation Data



mouse heart tissue were subjected to SDS PAGE followed by western blot with 23016-1-AP (Nav1.5 antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 23016-1-AP (Nav1.5 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 23016-1-AP (Nav1.5 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).