

For Research Use Only

Nav1.5 Polyclonal antibody

Catalog Number: 23016-1-AP **8 Publications**



Basic Information

Catalog Number: 23016-1-AP	GenBank Accession Number: BC140813	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 750 µg/ml by Nanodrop and 600 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 6331	Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q14524	
Isotype: IgG	Full Name: sodium channel, voltage-gated, type V, alpha subunit	
Immunogen Catalog Number: AG19275	Calculated MW: 2016 aa, 227 kDa	
	Observed MW: 227 kDa	

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls:
Cited Applications: WB, IHC, IF	WB: mouse heart tissue, IHC: mouse skeletal muscle tissue,
Species Specificity: human, mouse	
Cited Species: human, rat, mouse	

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⁺ 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

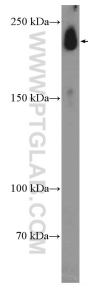
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

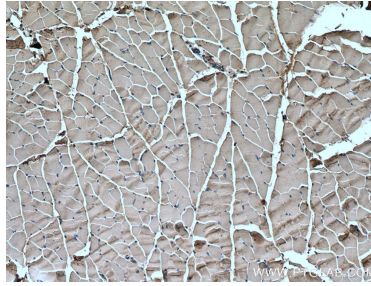
For technical support and original validation data for this product please contact:
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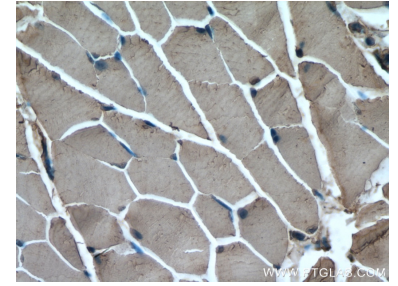
Selected Validation Data



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).