10320 Camino Santa Fe, Suite G
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SCN10A/Nav1.8 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58487

Specification

SCN10A/Nav1.8 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	Q9Y5Y9
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**215 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human SCN10A/NAV1.8**
Epitope Specificity	**1151-1250/1956**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Membrane; Multi-pass membrane protein. Note=It can be translocated to the extracellular membrane through association with S100A10.**
SIMILARITY	**Belongs to the sodium channel (TC 1.A.1.10) family. Nav1.8/SCN10A subfamily.Contains 1 IQ domain.**
SUBUNIT	**The voltage-resistant sodium channel consists of an ion conducting pore forming alpha-subunit regulated by one or more associated auxiliary subunits SCN1B, SCN2B and SCN3B. Found in a number of complexes with PRX, DYNLT1 and PDZD2. Interacts with proteins such as FSTL1, PRX, DYNLT1, PDZD2, S100A10 and many others. Interacts with NEDD4 and NEDD4L.**
Post-translational modifications	**Ubiquitinated by NEDD4L; which promotes its endocytosis.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
Nav1.8 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, Nav1.8 forms a sodium-selective channel through which sodium ions may pass in accordance with their electrochemical gradient. It is a tetrodotoxin-resistant sodium channel isoform. Nav1.8 plays a role in neuropathic pain mechanisms.

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SCN10A/Nav1.8 Polyclonal Antibody - Additional Information

Gene ID 6336

Other Names
Sodium channel protein type 10 subunit alpha, Peripheral nerve sodium channel 3, PN3, hPN3, Sodium channel protein type X subunit alpha, Voltage-gated sodium channel subunit alpha Nav1.8, SCN10A

Target/Specificity
Expressed in the dorsal root ganglia and sciatic nerve.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

SCN10A/Nav1.8 Polyclonal Antibody - Protein Information

Name SCN10A (HGNC:10582)

Function
Tetrodotoxin-resistant channel that 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 sodium ions may pass in accordance with their electrochemical gradient. Plays a role in neuropathic pain mechanisms.

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:D0E0C2}; Multi-pass membrane protein {ECO:0000250|UniProtKB:D0E0C2}. Note=It can be translocated to the cell membrane through association with S100A10

Tissue Location
Expressed in the dorsal root ganglia and sciatic nerve.

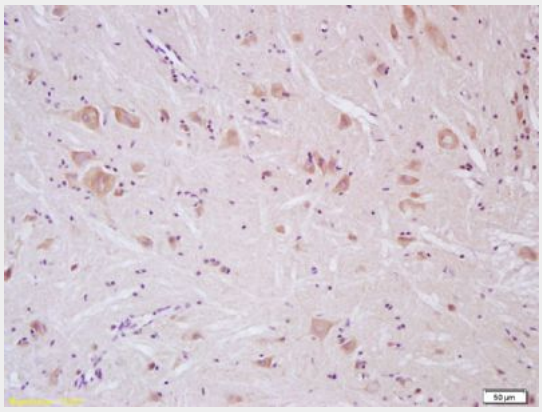
SCN10A/Nav1.8 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

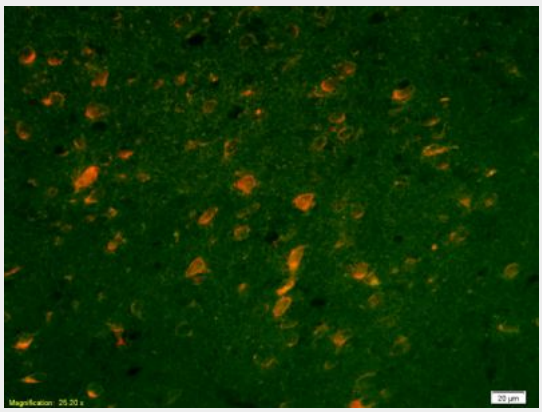
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SCN10A/Nav1.8 Polyclonal Antibody - Images



Tissue/cell: rat spinal cord; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-SCN10A Polyclonal Antibody, Unconjugated(bs-6685R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-SCN10A Polyclonal Antibody, Unconjugated(bs-6685R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(bs-0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C.