

Rabbit Nav1.8 Polyclonal Antibody | anti-SCN10A antibody

Nav1.8 Antibody

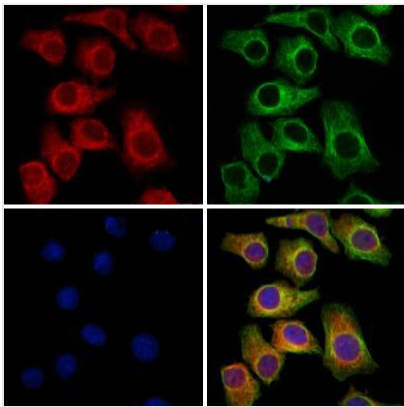
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31173	Rabbit	Human, Mouse, Rat	Western Blot, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

Nav1.8; Polyclonal Antibody; Nav1.8 Antibody; hPN3; mPN3; Peripheral nerve sodium channel 3; Pn3 (gene name); PN3; SCN10A; SCNAA_HUMAN; Sensory neuron sodium channel; Sns (gene name); SNS; Sodium channel protein type 10 subunit alpha; Sodium channel protein type X alpha subunit; Sodium channel protein type X subunit alpha; Voltage-gated sodium channel alpha subunit Nav1.8; Voltage-gated sodium channel subunit alpha Nav1.8; anti-SCN10A antibody

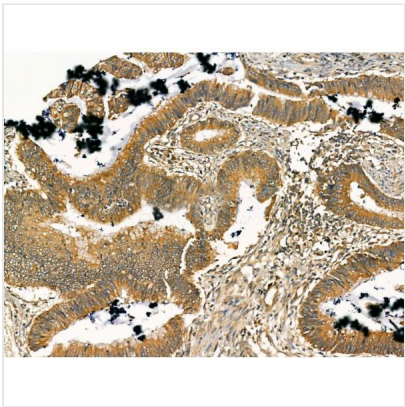
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Nav1.8 Antibody detects endogenous levels of total Nav1.8.
Purity/Purification	Peptide affinity purification
Form/Format	IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	1956
Applicable Applications for anti-SCN10A antibody	WB (Western Blot), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA
Application Notes	WB: 1:500-1:2000 IF: 1:100-1:500 ICC: 1:100-1:500 IHC: 1:50-1:200 ELISA(peptide): 1:20,000-1:40,000 *The optimal dilutions should be determined by the end user. IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween@20 at 4°C with gentle shaking, overnight.
Immunogen	A synthesized peptide derived from human Nav1.8, corresponding to a region within the internal amino acids.
Preparation and Storage	Store at -20 degree C.



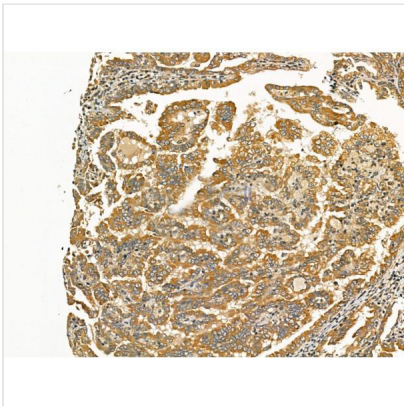
IF (Immunofluorescence)

AAA31173 staining HeLa cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. Samples were then incubated with primary Ab(AAA31173 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



IHC (Immunohistochemistry-Paraffin)

AAA31173 at 1/100 staining Human colorectal cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



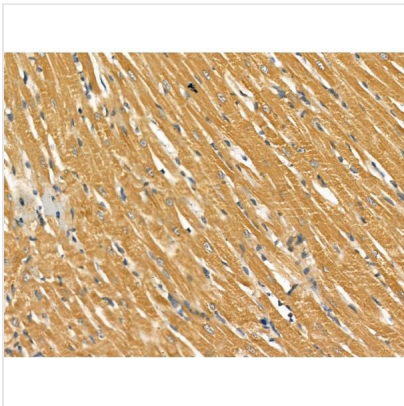
IHC (Immunohistochemistry-Paraffin)

AAA31173 at 1/100 staining Human kidney cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



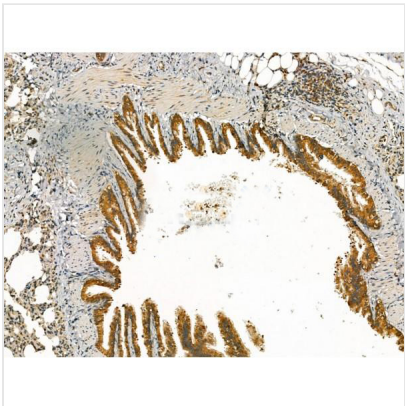
IHC (Immunohistochemistry-Paraffin)

AAA31173 at 1/100 staining Mouse heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)

AAA31173 at 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)

AAA31173 at 1/100 staining Rat lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-SCN10A antibody

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.

Post Translational Modifications: Ubiquitinated by NEDD4L; which promotes its endocytosis. Phosphorylation at Ser-1451 by PKC in a highly conserved cytoplasmic loop slows inactivation of the sodium channel and reduces peak sodium currents. Lacks the cysteine which covalently binds the conotoxin GVIIJ. This cysteine (position 816) is speculated in other sodium channel subunits alpha to be implied in covalent binding with the sodium channel subunit beta-2 or beta-4.

Subcellular Location: Cell membrane>Multi-pass membrane protein. Note: It can be translocated to the cell membrane through association with S100A10.

Tissue Specificity: Expressed in the dorsal root ganglia and sciatic nerve.

Subunit Structure: The channel consists of an ion conducting pore forming alpha-subunit regulated by one or more associated auxiliary subunits SCN1B, SCN2B and SCN3B; electrophysiological properties may vary depending on the type of the associated beta subunits. Found in a number of complexes with PRX, DYNLT1 and PDZD2. Interacts with proteins such as FSTL1, PRX, DYNLT1, PDZD2, S100A10 and many others (By similarity). Interacts with NEDD4 and NEDD4L.

Similarity: The sequence contains 4 internal repeats, each with 5 hydrophobic segments (S1, S2, S3, S5, S6) and one positively charged segment (S4). Segments S4 are probably the voltage-sensors and are characterized by a series of positively charged amino acids at every third position. Belongs to the sodium channel (TC 1.A.1.10) family. Nav1.8/SCN10A subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	110835710
NCBI Accession #	NP_006505.2
NCBI GenBank Nucleotide #	NP_006505.2
UniProt Accession #	Q9Y5Y9
Molecular Weight	220kDa
NCBI Official Full Name	sodium channel protein type 10 subunit alpha isoform 1
UniProt Protein Name	Sodium channel protein type 10 subunit alpha
UniProt Gene Name	SCN10A
UniProt Synonym Gene Names	PN3; hPN3
UniProt Entry Name	SCNAA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/polyclonal/nav18-antibody-western-blot-immunofluorescence-immunocytochemistry-elisa/31173>