

Nav1.8 Antibody
Nav1.8 Antibody, Clone S134-12
Catalog # ASM10218

Specification

Nav1.8 Antibody - Product Information

Application	IHC
Primary Accession	O62968
Other Accession	NP_058943.1
Host	Mouse
Isotype	IgG2a
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Monoclonal
Format	ATTO 488

Description

Mouse Anti-Rat Nav1.8 Monoclonal IgG2a

Target/Specificity

Detects ~220kDa. No cross reactivity against other Nav channels.

Other Names

mPN3 antibody, Peripheral nerve sodium channel 3 antibody, Pn3 (gene name) antibody, PN3 antibody, Scn10a antibody, Sensory neuron sodium channel antibody, Sns (gene name) antibody, SNS antibody, Sodium channel protein type 10 subunit alpha antibody, Sodium channel protein type X alpha subunit antibody, Voltage-gated sodium channel alpha subunit Nav1.8 antibody

Immunogen

Fusion protein amino acids 1724-1956 of rat Nav1.8

Purification

Protein G Purified

Storage **-20°C**

Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C**

Certificate of Analysis

1 µg/ml of SMC-342 was sufficient for detection of Nav1.8 in 10 µg of COS cell lysate transiently expressing Nav1.8 by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization

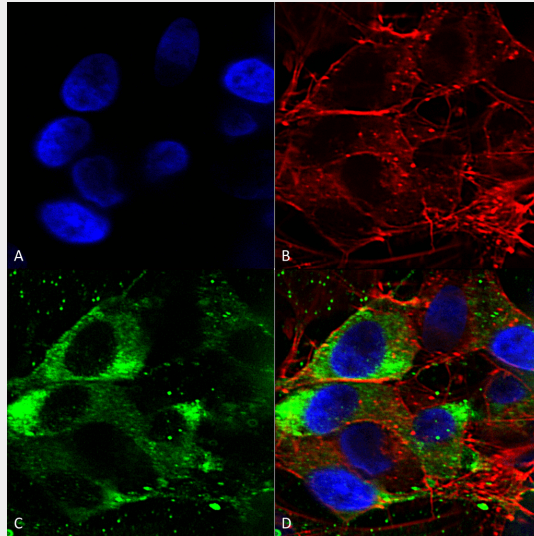
Membrane

Nav1.8 Antibody - Protocols

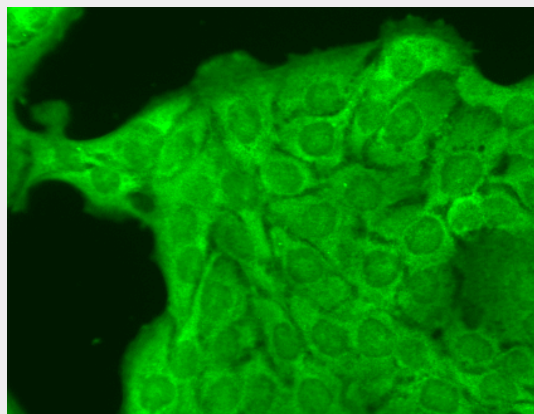
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

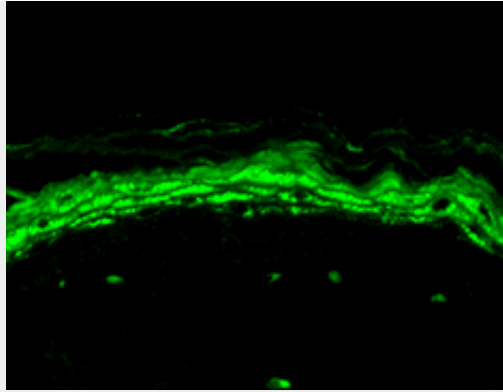
Nav1.8 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Nav1.8 Monoclonal Antibody, Clone S134 (ASM10218). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-Nav1.8 Monoclonal Antibody (ASM10218) at 1:50 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) Nav1.8 Antibody (D) Composite.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Nav1.8 Monoclonal Antibody, Clone S134 (ASM10218). Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-Nav1.8 Monoclonal Antibody (ASM10218) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Cytoplasmic staining and some dull nuclear staining.



Immunohistochemistry analysis using Mouse Anti-Nav1.8 Monoclonal Antibody, Clone S134 (ASM10218). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-Nav1.8 Monoclonal Antibody (ASM10218) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Heavy filaggrin-like staining, lower epidermal cells have some staining.

Nav1.8 Antibody - Background

Nav1.8 is a voltage-gated sodium channel and plays a critical role in the generation and conduction of action potentials and is thus important for electrical signaling by most excitable cells. Therapeutically, the association of pain insensitivity with the loss of function of a certain sodium channel may have implications. Since Nav1.8 is not present in cardiac muscle or neurons in the central nervous system, blockers of Nav1.8 will not have direct action on these cells and thus can have less side effects than current pain medications. By performing more studies, there is a possibility to develop a new generation of drugs that can reduce the pain intensity in animals.

Nav1.8 Antibody - References

1. Dray A. (2008) Br. J. Anaesth. 101(1): 48-58.
2. Dray A., Read S.J (2007) Arthritis Res. Ther. 9(3): 212.
3. Samuels M.E., teMorshe R.H., Lynch M.E., Drenth J.P. (2008) Mol Pain. 4: 21.