

Datasheet for 200-301-G19**Nav1.2 Antibody****Overview**

Description:	Anti-Nav1.2 (MOUSE) Monoclonal Antibody - 200-301-G19
Item No.:	200-301-G19
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Mouse

Product Details

Background:	Nav1.2 is a protein that in humans is encoded by the SCN2A gene. Voltage-gated sodium channels are transmembrane glycoprotein complexes composed of a large alpha subunit with 24 transmembrane domains and one or more regulatory beta subunits. They are responsible for the generation and propagation of action potentials in neurons and muscle. Neuronal Nav1.2 channels are therapeutic targets in seizure, pain and stroke.
Synonyms:	SCN, SCN2A, ScpII, NachII, Nav1.2, Scn2a2, RII/RIIA, RNSCPIIR, Scn2a1, Sodium channel protein type 2 subunit alpha, Sodium channel protein brain II subunit alpha, Sodium channel protein type II subunit alpha, Voltage-gated Sodium channel subunit alpha Nav1.2
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	S69-3
Format:	IgG2a

Target Details

Gene Name:	Scn2a
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Nav1.2 Antibody was produced in mice by repeated immunizations raised against a fusion protein corresponding to the cytoplasmic C-terminus region of rat Nav1.2.

Purity/Specificity: Anti-Nav1.2 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with Nav1.2 from Mouse, Human, and Rat based on 100% homology with the immunizing sequence. Cross-reactivity with Nav1.2 from other sources has not been determined. Ion Channels research.

Relevant Links:

- [NCBI - NP_036779.1](#)
- [GeneID - 24766](#)
- [UniProtKB - P04775](#)

Application Details

Tested Applications: IHC, WB

Application Note: Anti-Nav1.2 Antibody is tested for use in WB, IP, and IHC. Expect a band approximately ~250kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

IF: 1.0-10ug/mL

IHC: 0.1-1.0ug/mL

IP: User Optimized

WB: 1ug/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.09% (w/v) Sodium Azide

Stabilizer: 50% (v/v) Glycerol

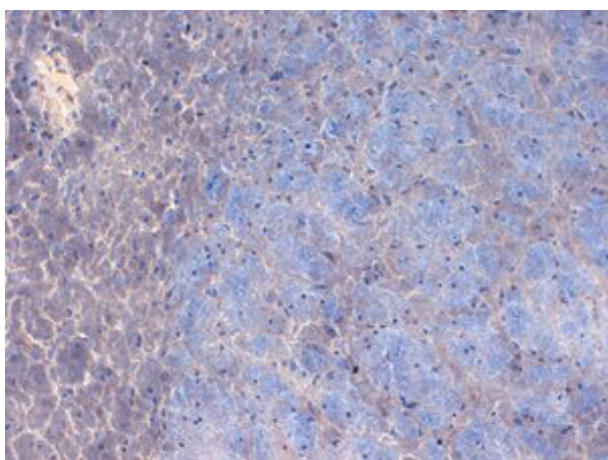
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

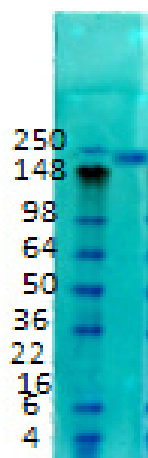
Expiration: Expiration date is one (1) year from date of receipt.

Images



Immunohistochemistry

Immunohistochemistry of mouse anti-Nav1.2 antibody.
Tissue: Frozen sections of mouse brain extract. Primary Antibody: Nav1.2 antibody at 1 µg/mL for 1h at RT. Secondary antibody: Peroxidase mouse secondary at 1:10,000 for 45 min at RT. Localization: Membrane. Staining: Nav1.2 as brown signal.



Western Blot

Western Blot of mouse anti-Nav1.2 antibody. Lane 1: Rat Brain Membrane tissue. Primary antibody: Nav1.2 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 227.8kDa/250kD. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.