

**Datasheet for 200-301-G21****NAV1.7 Antibody****Overview**

<b>Description:</b>	Anti-Nav1.7 (MOUSE) Monoclonal Antibody - 200-301-G21
<b>Item No.:</b>	200-301-G21
<b>Size:</b>	100 µg
<b>Applications:</b>	IF, IHC, IP, WB
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host Species:</b>	Mouse

**Product Details**

<b>Background:</b>	Nav1.7 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 Nav1.7 is not present in cardiac muscle or neurons in the central nervous system, blockers of Nav1.7 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.
<b>Synonyms:</b>	ETHA, hNE Na, NENA, PN1, SCN9A, voltage gated sodium channel subunit alpha Nav1.7, peripheral sodium channel 1, neuroendocrine sodium channel, Sodium channel protein type 9 subunit alpha
<b>Host Species:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Clone ID:</b>	N68/6
<b>Format:</b>	IgG1

**Target Details**

<b>Gene Name:</b>	SCN9A
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Immunogen Type:</b>	Recombinant Protein

<b>Immunogen:</b>	Nav1.7 Antibody was produced in mice by repeated immunizations raised against a fusion protein corresponding to the cytoplasmic C-terminus region of human Nav1.7.
<b>Purity/Specificity:</b>	Anti-NAV1.7 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with NAV1.7 from Human, Rat, and Mouse based on 100% homology with the immunizing sequence. No cross-reactivity against other Nav channels. Cross-reactivity with NAV1.7 from other sources has not been determined. Channels and Transporters research.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">NCBI - NP_002968.1</a></li><li>• <a href="#">GeneID - 6335</a></li><li>• <a href="#">UniProtKB - Q15858</a></li></ul>

## Application Details

<b>Tested Applications:</b>	IF, IHC, IP, WB
<b>Application Note:</b>	Anti-NAV1.7 Antibody is tested for use in WB, IP, IHC-P, and IF microscopy. Expect a band approximately ~230kDa on specific lysates. Specific conditions for reactivity should be optimized by the end user.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>IF:</b>	1.0-10ug/mL
<b>IHC:</b>	0.1-1.0ug/mL
<b>IP:</b>	User Optimized
<b>WB:</b>	1-10ug/mL

## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	1X PBS, pH 7.4
<b>Preservative:</b>	0.09% (w/v) Sodium Azide
<b>Stabilizer:</b>	50% (v/v) Glycerol

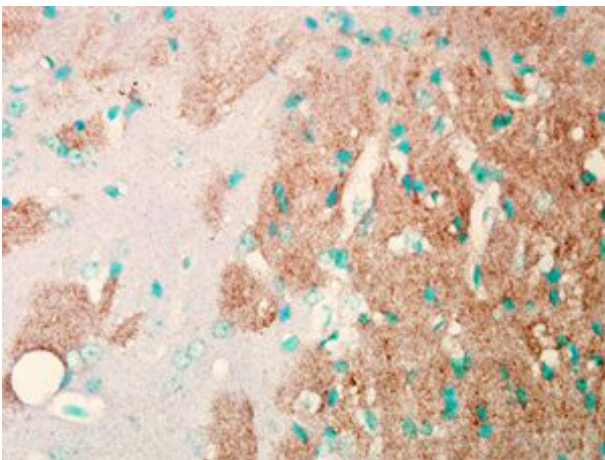
## Shipping & Handling

<b>Shipping Condition:</b>	Wet Ice
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**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.

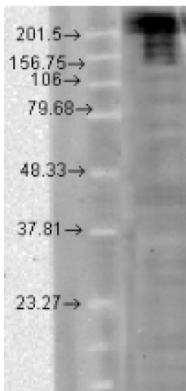
**Expiration:** Expiration date is one (1) year from date of receipt.

## Images



### Immunohistochemistry

Immunohistochemistry of mouse anti-Nav1.7 antibody. Tissue: Mouse brain tissues. Primary Antibody: Nav1.7 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: Nav1.7 as brown signal.



### Western Blot

Western Blot of mouse anti-Nav1.7 antibody. Lane 1: CHO cells. Primary antibody: Nav1.7 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: 226.3 kDa/230kD. 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.