


## Product datasheet

### Anti-Nav1.7 antibody ab65167

★★★★☆ **3 Abreviews** **8 References**

#### Overview

<b>Product name</b>	Anti-Nav1.7 antibody
<b>Description</b>	Rabbit polyclonal to Nav1.7
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-Fr, IHC-P, IHC-FoFr, ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide within Human Nav1.7 aa 1000-1100. The exact sequence is proprietary. (Peptide available as <b>ab192016</b> )
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Constituent: Whole serum
<b>Purity</b>	Whole antiserum
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab65167 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		Use at an assay dependent concentration.
IHC-P	★ ★ ★ ★ ★ (1)	Use at an assay dependent concentration.
IHC-FoFr		Use at an assay dependent concentration. PubMed: 21441906
ICC/IF	★ ★ ★ ★ ★ (1)	Use at an assay dependent concentration.
WB	★ ★ ★ ★ ★ (1)	Use at an assay dependent concentration.

## Target

<b>Function</b>	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 Na(+) ions may pass in accordance with their electrochemical gradient (PubMed:7720699, PubMed:17167479, PubMed:25240195, PubMed:26680203, PubMed:15385606, PubMed:16988069, PubMed:17145499, PubMed:19369487, PubMed:24311784). It is a tetrodotoxin-sensitive Na(+) channel isoform (PubMed:7720699). Plays a role in pain mechanisms, especially in the development of inflammatory pain (PubMed:17167479, PubMed:17145499, PubMed:19369487, PubMed:24311784).
<b>Tissue specificity</b>	Expressed strongly in dorsal root ganglion, with only minor levels elsewhere in the body, smooth muscle cells, MTC cell line and C-cell carcinoma. Isoform 1 is expressed preferentially in the central and peripheral nervous system. Isoform 2 is expressed preferentially in the dorsal root ganglion.
<b>Involvement in disease</b>	Primary erythralgia Indifference to pain, congenital, autosomal recessive Paroxysmal extreme pain disorder Generalized epilepsy with febrile seizures plus 7 Febrile seizures, familial, 3B
<b>Sequence similarities</b>	Belongs to the sodium channel (TC 1.A.1.10) family. Nav1.7/SCN9A subfamily. Contains 1 IQ domain.
<b>Domain</b>	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.
<b>Post-translational modifications</b>	Phosphorylation at Ser-1490 by PKC in a highly conserved cytoplasmic loop increases peak sodium currents. Ubiquitinated by NEDD4L; which may promote its endocytosis. Does not seem to be ubiquitinated by NEDD4.
<b>Cellular localization</b>	Cell membrane. Cell projection. In neurite terminals.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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