

**Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-NAv1.7)
Recombinant Antibody
Catalog # APR11029****Specification**

Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-NAv1.7) - Product Information

Application	FC, Kinetics, Animal Model
Primary Accession	Q15858
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	150 KDa

Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-NAv1.7) - Additional Information**Target/Specificity**
SCN9a / Nav1.7**Endotoxin**
< 0.001EU/ µg,determined by LAL method.**Conjugation**
Unconjugated**Expression system**
CHO Cell**Format**
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.**Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-NAv1.7) - Protein Information****Name** SCN9A ([HGNC:10597](#))**Synonyms** NENA**Function**
Pore-forming subunit of Nav1.7, a voltage-gated sodium (Nav) channel that directly mediates the depolarizing phase of action potentials in excitable membranes. Navs, also called VGSCs (voltage-gated sodium channels) or VDSCs (voltage-dependent sodium channels), operate by switching between closed and open conformations depending on the voltage difference across the membrane. In the open conformation they allow Na(+) ions to selectively pass through the pore, along their electrochemical gradient. The influx of Na(+) ions provokes membrane depolarization, initiating the propagation of electrical signals throughout cells and tissues (PubMed:15385606, PubMed:16988069, PubMed:17145499, PubMed:17167479, PubMed:19369487, PubMed:24311784, PubMed:25240195, PubMed:26680203, PubMed:7720699). Nav1.7 plays a crucial role in controlling the excitability and action potential propagation from nociceptor neurons, thereby contributing to the sensory perception of pain (PubMed:17145499, PubMed:17167479, PubMed:19369487, PubMed:24311784).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, neuron projection. Cell projection, axon. Note=Localizes to neuron terminals (PubMed:30765606, PubMed:30795902). Also detected at Nodes of Ranvier (PubMed:30795902).

Tissue Location

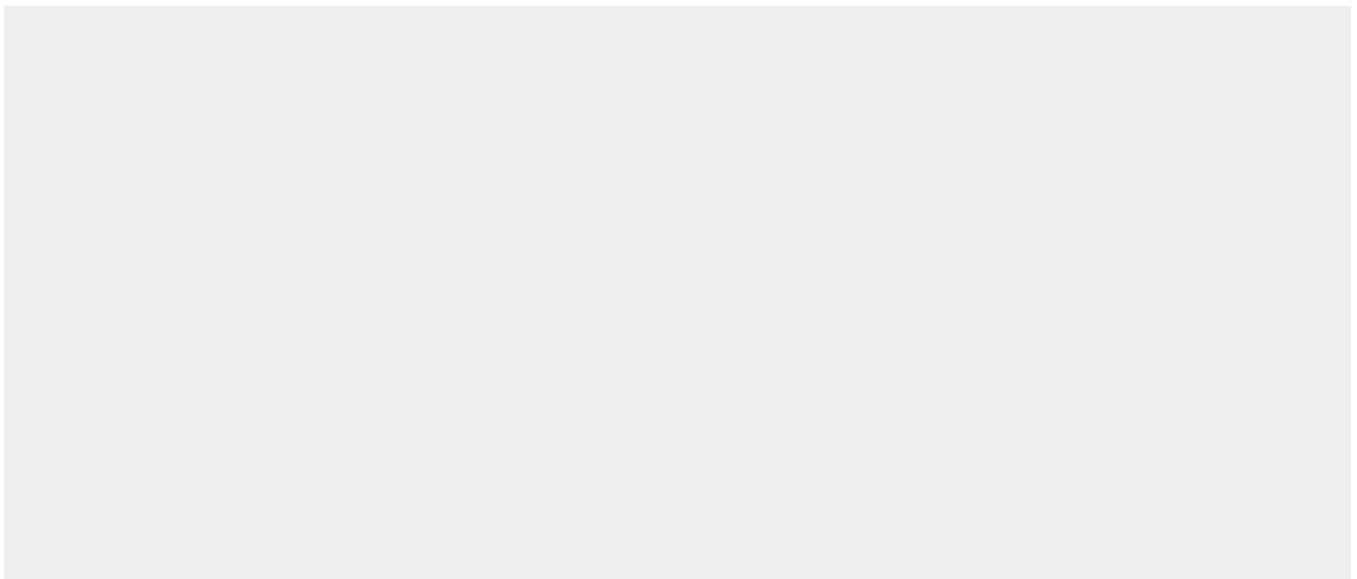
Expressed strongly in dorsal root ganglion, with only minor levels elsewhere in the body, smooth muscle cells, MTC cell line and C-cell carcinoma. Also expressed in vagus nerves within the head and neck region (PubMed:31647222). Isoform 1 is expressed preferentially in the central and peripheral nervous system. Isoform 2 is expressed preferentially in the dorsal root ganglion

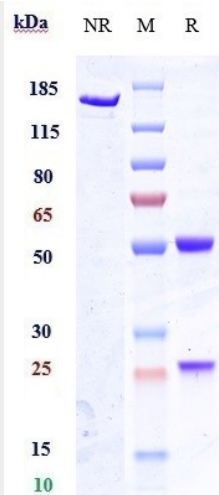
Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-NAv1.7) - Protocols

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

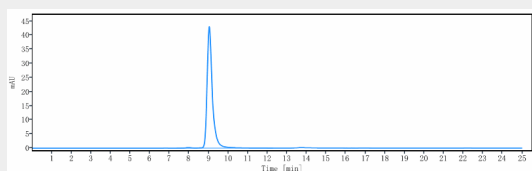
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-NAv1.7) - Images





Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-Nav1.7) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-SCN9a / Nav1.7 Reference Antibody (Duke anti-Nav1.7) is more than 95%, determined by SEC-HPLC.