10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



Nav1.6 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51970

Product Information

Application WB

Primary Accession Q9UQD0

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW225280

Additional Information

Gene ID 6334

Other Names Sodium channel protein type 8 subunit alpha, Sodium channel protein type

VIII subunit alpha, Voltage-gated sodium channel subunit alpha Nav16,

SCN8A, MED

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name SCN8A (HGNC:10596)

Synonyms MED

Function Pore-forming subunit of a voltage-gated sodium channel complex assuming

opened or closed conformations in response to the voltage difference across membranes and through which sodium ions selectively pass along their electrochemical gradient (PubMed:24874546, PubMed:25239001,

PubMed:25725044, PubMed:26900580, PubMed:29726066,

PubMed:<u>33245860</u>, PubMed:<u>36696443</u>, PubMed:<u>36823201</u>). Contributes to neuronal excitability by regulating action potential threshold and propagation

(PubMed:<u>24874546</u>, PubMed:<u>25239001</u>, PubMed:<u>25725044</u>, PubMed:<u>26900580</u>, PubMed:<u>29726066</u>, PubMed:<u>33245860</u>,

PubMed:36696443, PubMed:36823201).

Cellular Location Cell membrane; Multi-pass membrane protein. Cell projection, axon

{ECO:0000250|UniProtKB:Q9WTU3}. Note=Mainly localizes to the axon initial

segment. {ECO:0000250 | UniProtKB:Q9WTU3}

Expressed in the hippocampus with increased expression in epileptic tissue compared to normal adjacent tissue (at protein level) (PubMed:28842554).

Background

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. In macrophages and melanoma cells, isoform 5 may participate in the control of podosome and invadopodia formation.

References

Plummer N.W.,et al.J. Biol. Chem. 272:24008-24015(1997). Plummer N.W.,et al.Genomics 54:287-296(1998). Carrithers M.D.,et al.J. Biol. Chem. 284:8114-8126(2009). Lin C.,et al.Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases. Jeong S.-Y.,et al.Submitted (JAN-2000) to the EMBL/GenBank/DDBJ databases.

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