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Anti-Nav1.6 Antibody

Catalog # AP51970

Product Information

Application	WB, IF/IC
Primary Accession	Q9UQD0
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	225280

Additional Information

Gene ID	6334
Other Names	MED; Sodium channel protein type 8 subunit alpha; Sodium channel protein type VIII subunit alpha; Voltage-gated sodium channel subunit alpha Nav1.6
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Nav1.6. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
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:33245860, PubMed:36696443, PubMed:36823201). Contributes to neuronal excitability by regulating action potential threshold and propagation (PubMed:24874546, PubMed:25239001, PubMed:25725044, PubMed:26900580, PubMed:29726066, PubMed:33245860, 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

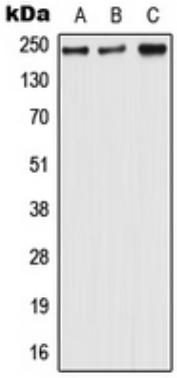
segment. {ECO:0000250|UniProtKB:Q9WTU3}

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

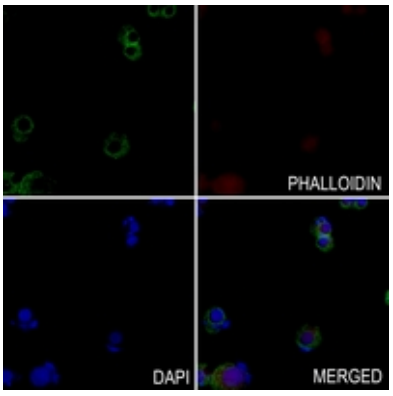
References

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.

Images



Western blot analysis of Nav1.6 expression in MCF7 (A), Raw264.7 (B), H9C2 (C) whole cell lysates. (Predicted band size: 225 kD; Observed band size: 225 kD)



Immunofluorescent analysis of Nav1.6 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).