

SCN8A/Nav1.6 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58490

Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession Q9UQD0

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 225280
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human SCN8A/Nav1.6

Epitope Specificity 251-314/314

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Cytoplasm, perinuclear region.

SIMILARITY Contains 1 CRAL-TRIO domain.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions 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.

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 Nav1.6,

SCN8A, MED

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

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

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

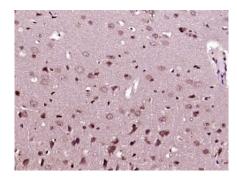
{ECO:0000250|UniProtKB:Q9WTU3}. Note=Mainly localizes to the axon initial

segment. {ECO:0000250 | UniProtKB:Q9WTU3}

Tissue Location Expressed in the hippocampus with increased expression in epileptic tissue

compared to normal adjacent tissue (at protein level) (PubMed:28842554).

Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SCN8A/Nav1.6) Polyclonal Antibody, Unconjugated (AP58490) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.