

Anti-SCNAA antibody



Description Unconjugated Rabbit polyclonal to SCNAA

Model STJ191434

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

Gene ID <u>6336</u>

Gene Symbol SCN10A

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity SCNAA Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Expressed in the dorsal root ganglia and sciatic nerve.

Purification SCNAA antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Sodium channel protein type 10 subunit alpha Peripheral nerve sodium

channel 3 PN3 hPN3 Sodium channel protein type X subunit alpha Voltage-

gated sodium channel subunit alpha Nav1.8

Molecular Weight 215 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:10582OMIM:604427</u>

Alternative Names Sodium channel protein type 10 subunit alpha Peripheral nerve sodium

channel 3 PN3 hPN3 Sodium channel protein type X subunit alpha Voltage-

gated sodium channel subunit alpha Nav1.8

Function Tetrodotoxin-resistant channel that 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 sodium ions may pass in accordance with their electrochemical gradient. Plays a role in

neuropathic pain mechanisms.

Sequence and Domain Family 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.

Cellular Localization Cell membrane. It can be translocated to the cell membrane through

association with S100A10.

Post-translational Ubiquitinated by NEDD4L; which promotes its endocytosis. Phosphorylation

at Ser-1451 by PKC in a highly conserved cytoplasmic loop slows inactivation of the sodium channel and reduces peak sodium currents. Lacks the cysteine which covalently binds the conotoxin GVIIJ. This cysteine (position 816) is speculated in other sodium channel subunits alpha to be implied in covalent

binding with the sodium channel subunit beta-2 or beta-4.

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Modifications

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