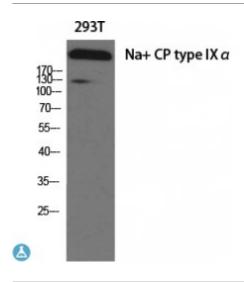


Anti-Na+ CP type I alpha antibody



Description Rabbit polyclonal to Na+ CP type IXalpha.

Model STJ94332

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human Na+ CP type IXalpha

Immunogen Region 620-700 aa, Internal

Gene ID <u>6335</u>

Gene Symbol SCN9A

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000

Specificity Na+ CP type IXalpha Polyclonal Antibody detects endogenous levels of Na+

CP type IXalpha protein.

Tissue Specificity Expressed strongly in dorsal root ganglion, with only minor levels elsewhere

in the body, smooth muscle cells, MTC cell line and C-cell carcinoma. Isoform 1 is expressed preferentially in the central and peripheral nervous system. Isoform 2 is expressed preferentially in the dorsal root ganglion.

Purification The 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 9 subunit alpha Neuroendocrine sodium channel

hNE-Na Peripheral sodium channel 1 PN1 Sodium channel protein type IX

subunit alpha Voltage-gated sodium channel subunit alpha Nav1.7

Molecular Weight 220 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

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

Database Links HGNC:10597OMIM:133020

Alternative Names Sodium channel protein type 9 subunit alpha Neuroendocrine sodium channel

hNE-Na Peripheral sodium channel 1 PN1 Sodium channel protein type IX

subunit alpha Voltage-gated sodium channel subunit alpha Nav1.7

Function 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 . It is a tetrodotoxin-sensitive Na(+) channel isoform

. Plays a role in pain mechanisms, especially in the development of

inflammatory pain.

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 Cell projection. In neurite terminals.

Post-translational Phosphorylation at Ser-1490 by PKC in a highly conserved cytoplasmic loop

Modifications increases peak sodium currents. Ubiquitinated by NEDD4L; which may

promote its endocytosis. Does not seem to be ubiquitinated by NEDD4.

St John's Laboratory Ltd

F +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com