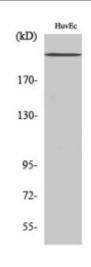


## Anti-Na+ CP-pan antibody



**Description** 

Rabbit polyclonal to Na+ CP-pan.

Model STJ94335

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human Na+ CP-pan

Immunogen Region 1440-1520 aa, Internal

**Gene ID** <u>6323</u>

Gene Symbol SCN1A

**Dilution range** WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity Na+ CP-pan Polyclonal Antibody detects endogenous levels of Na+ CP-pan

protein.

**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 1 subunit alpha Sodium channel protein brain I

subunit alpha Sodium channel protein type I subunit alpha Voltage-gated

sodium channel subunit alpha Nav1.1

Molecular Weight 230 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 <u>HGNC:10585OMIM:182389</u>

Alternative Names Sodium channel protein type 1 subunit alpha Sodium channel protein brain I

subunit alpha Sodium channel protein type I subunit alpha Voltage-gated

sodium channel subunit alpha Nav1.1

**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. Plays a key role in brain, probably by regulating the moment when neurotransmitters are released in neurons. Involved in sensory perception of mechanical pain: activation in somatosensory neurons induces pain without neurogenic inflammation and produces hypersensitivity to

mechanical, but not thermal stimuli.

**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. The S3b-S4 and S1-S2 loops of repeat IV are targeted by H.maculata toxins Hm1a and Hm1b, leading to inhibit fast inactivation of Nav1.1/SCN1A. Selectivity for H.maculata toxins

Hm1a and Hm1b depends on S1-S2 loops of repeat IV.

Cellular Localization Cell membrane

**Post-translational** Phosphorylation at Ser-1516 by PKC in a highly conserved cytoplasmic loop

**Modifications** slows inactivation of the sodium channel and reduces peak sodium currents.

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