

Product Name: Na⁺ CP type VII α Rabbit Polyclonal Antibody
Catalog #: APRab14376

Summary

Production Name	Na ⁺ CP type VII α Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,ELISA
Reactivity	Human,Monkey

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	SCN7A SCN7A; SCN6A; Sodium channel protein type 7 subunit alpha; Putative voltage-gated
Alternative Names	sodium channel subunit alpha Nax; Sodium channel protein cardiac and skeletal muscle subunit alpha; Sodium channel protein type VII subunit alpha
Gene ID	6332.0
SwissProt ID	Q01118.The antiserum was produced against synthesized peptide derived from human SCN7A. AA range:771-820

Application

Dilution Ratio	IF 1:200-1:1000.
Molecular Weight	200kD

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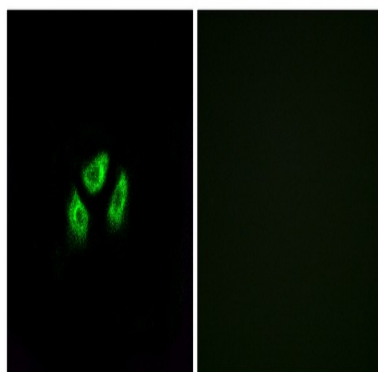


Background

This gene encodes one of the many voltage-gated sodium channel proteins. For proper functioning of neurons and muscles during action potentials, voltage-gated sodium channels direct sodium ion diffusion for membrane depolarization. This sodium channel protein has some atypical characteristics; the similarity between the human and mouse proteins is lower compared to other orthologous sodium channel pairs. Also, the S4 segments, which sense voltage changes, have fewer positive charged residues than in other sodium channels; domain 4 has fewer arginine and lysine residues compared to other sodium channel proteins. Several alternatively spliced transcript variants exist, but the full-length natures of all of them remain unknown. [provided by RefSeq, Dec 2011],domain: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.,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.,similarity:Belongs to the sodium channel family.,tissue specificity:Heart and uterus.,

Research Area

Image Data



Immunofluorescence analysis of A549 cells, using SCN7A Antibody. The picture on the right is blocked with the synthesized peptide.

Note

For research use only.