

---

**Product Name: Na<sup>+</sup> CP type VII $\alpha$  Rabbit Polyclonal Antibody****Catalog #: APRab14376**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC
<b>Reactivity</b>	Human,Monkey
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:50-1:300
<b>Molecular Weight</b>	200kDa

**Antigen Information**

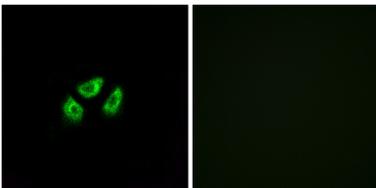
<b>Gene Name</b>	SCN7A SCN7A; SCN6A; Sodium channel protein type 7 subunit alpha; Putative voltage-gated
<b>Alternative Names</b>	sodium channel subunit alpha Nax; Sodium channel protein cardiac and skeletal muscle subunit alpha; Sodium channel protein type VII subunit alpha
<b>Gene ID</b>	6332.0
<b>SwissProt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

## 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 that 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.