

## Na<sup>+</sup> CP type VIIα Polyclonal Antibody

<b>Catalog No :</b>	YT2968
<b>Reactivity :</b>	Human;Monkey
<b>Applications :</b>	WB;IHC
<b>Target :</b>	Na <sup>+</sup> CP type VIIα
<b>Fields :</b>	>>Adrenergic signaling in cardiomyocytes
<b>Gene Name :</b>	SCN7A
<b>Protein Name :</b>	Sodium channel protein type 7 subunit alpha
<b>Human Gene Id :</b>	6332
<b>Human Swiss Prot No :</b>	Q01118
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human SCN7A. AA range:771-820
<b>Specificity :</b>	Na <sup>+</sup> CP type VIIα Polyclonal Antibody detects endogenous levels of Na <sup>+</sup> CP type VIIα protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000;IHC 1:50-300
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	200kD

## 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 nature of all of them remain unknown. [provided by RefSeq, Dec 2011],

## Function :

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.,

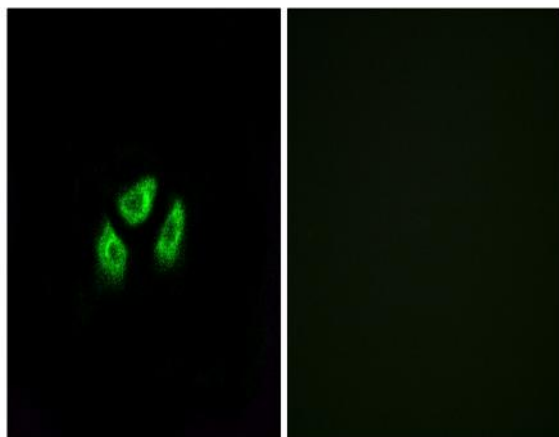
## Subcellular Location :

Cell membrane ; Multi-pass membrane protein .

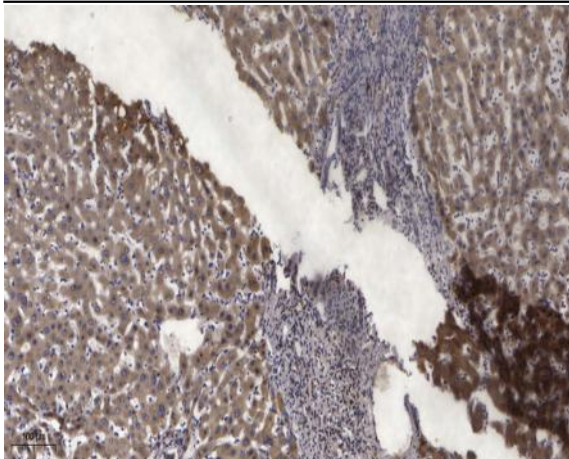
## Expression :

Heart and uterus.

## Products Images



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



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).