

AP06320PU-N

Polyclonal Antibody to Na⁺ channel protein (pan) - Aff - Purified

Alternate names:

Sodium channel protein brain pan, Sodium channel protein pan, Voltage-gated sodium channel pan

Quantity:

0.1 mg

Concentration:

1.0 mg/ml

Background:

Epithelial sodium channels are amiloride-sensitive members of the Degenerin/epithelial sodium channel (Deg/ENaC) superfamily of ion channels. Members of this superfamily of ion channels share organizational similarity in that they all possess two short intracellular amino and carboxyl termini, two short membrane spanning segments, and a large extracellular loop with a conserved cysteine-rich region. There are three homologous isoforms of the ENaC (alpha, beta, and gamma) protein. ENaC in the kidney, lung, and colon plays an essential role in trans-epithelial sodium and fluid balance. ENaC also mediates aldosterone-dependent sodium reabsorption in the distal nephron of the kidney, thus regulating blood pressure. ENaC is thought to be regulated, in part, through association with the cystic fibrosis transmembrane conductance regulator (CFTR) chloride ion channel. Gain-of-function mutations in beta- or gamma-ENaC can cause severe arterial hypertension (Liddle's syndrome) and loss-of-function mutations in alpha- or beta-ENaC causes pseudohypoaldosteronism (PHA-1).

Host:

Rabbit

Immunogen:

Synthetic peptide, corresponding to amino acids 1470-1520 of Human SCN5A.

Format:

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).
Purification: Affinity Chromatography using epitope-specific immunogen.
Buffer System: Phosphate buffered saline (PBS), pH~7.2
Preservatives: 0.05% Sodium Azide

Applications:

Western blot: 1/500-1/1000.
Immunohistochemistry on paraffin sections: 1/50-1/200.
Immunofluorescence: 1/50-1/200.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Molecular Weight:

~ 230 kDa

Specificity:

This antibody detects endogenous levels of Sodium Channel-pan protein. (region surrounding Lys1493)

Species Reactivity:

Tested: Human.
Expected from sequence similarity: Mouse and Rat.

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

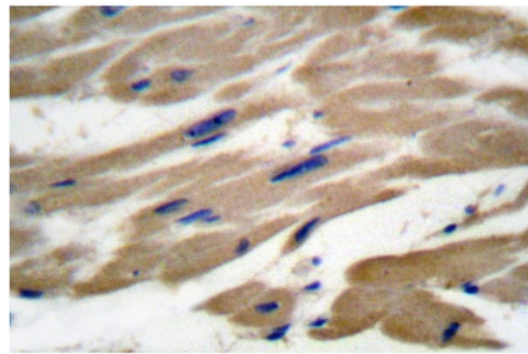
Product Citations:

Purchased from Acris:

1. Pasham V, Pathare G, Fajol A, Rexhepaj R, Michael D, Pakladok T, et al. OSR1-sensitive small intestinal Na⁺ transport. Am J Physiol Gastrointest Liver Physiol. 2012 Dec 1;303(11):G1212-9. doi: 10.1152/ajpgi.00367.2011. Epub 2012 Sep 27. PubMed PMID: 23019198.

Pictures:

Immunohistochemistry (IHC) analysis of Sodium Channel-pan antibody (Cat.-No.: AP06320PU-N) in paraffin-embedded human heart tissue.



Western blot (WB) analysis of Sodium Channel-pan antibody (Cat.-No.: AP06320PU-N) in extracts from HuvEc cells.

