10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ENaC β Polyclonal Antibody

Catalog # AP69734

Product Information

Application	WB, IHC-P, IF
Primary Accession	P51168
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72659

Additional Information

Gene ID	6338
Other Names	SCNN1B; Amiloride-sensitive sodium channel subunit beta; Beta-NaCH; Epithelial Na(+) channel subunit beta; Beta-ENaC; ENaCB; Nonvoltage-gated sodium channel 1 subunit beta; SCNEB
Dilution	WB~~WB 1:500-2000 Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

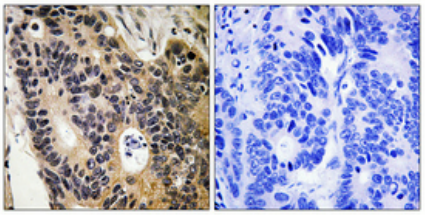
Name	SCNN1B {ECO:0000303|PubMed:7490094, ECO:0000312|HGNC:HGNC:10600}
Function	This is one of the three pore-forming subunits of the heterotrimeric epithelial sodium channel (ENaC), a critical regulator of sodium balance and fluid homeostasis (PubMed:30251954, PubMed:32729833, PubMed:7762608, PubMed:9792722). ENaC operates in epithelial tissues, where it mediates the electrodiffusion of sodium ions from extracellular fluid through the apical membrane of cells, with water following osmotically (PubMed:24124190). It plays a key role in maintaining sodium homeostasis through electrogenic sodium reabsorption in the kidneys (PubMed:12107247). Additionally, ENaC is essential for airway surface liquid homeostasis, which is crucial for proper mucus clearance (PubMed:24124190).
Cellular Location	Apical cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:P37090}; Multi-pass membrane protein

Tissue Location	Detected in placenta, lung and kidney (PubMed:7762608). Expressed in kidney (at protein level) (PubMed:22207244).

Background

Sodium permeable non-voltage-sensitive ion channel inhibited by the diuretic amiloride. Mediates the electrodiffusion of the luminal sodium (and water, which follows osmotically) through the apical membrane of epithelial cells. Plays an essential role in electrolyte and blood pressure homeostasis, but also in airway surface liquid homeostasis, which is important for proper clearance of mucus. Controls the reabsorption of sodium in kidney, colon, lung and sweat glands. Also plays a role in taste perception.

Images



Immunohistochemical analysis of paraffin-embedded Human colon cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.