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SCNN1B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20003c

Product Information

Application	WB, E
Primary Accession	P51168
Other Accession	NP_000327.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42043
Calculated MW	72659
Antigen Region	306-332

Additional Information

Gene ID	6338
Other Names	Amiloride-sensitive sodium channel subunit beta, Beta-NaCH, Epithelial Na(+) channel subunit beta, Beta-ENaC, ENaCB, Nonvoltage-gated sodium channel 1 subunit beta, SCNEB, SCNN1B
Target/Specificity	This SCNN1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 306-332 amino acids from the Central region of human SCNN1B.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SCNN1B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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).

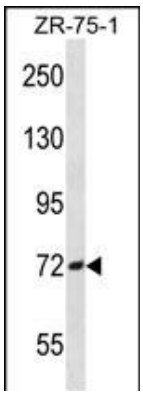
Background

Nonvoltage-gated, amiloride-sensitive, sodium channels control fluid and electrolyte transport across epithelia in many organs. These channels are heteromeric complexes consisting of 3 subunits: alpha, beta, and gamma. This gene encodes the beta subunit, and mutations in this gene have been associated with pseudohypoaldosteronism type 1 (PHA1), and Liddle syndrome.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Song, W., et al. J. Biol. Chem. 285(13):9716-9728(2010)
Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :
McGeachie, M., et al. Circulation 120(24):2448-2454(2009)
Azad, A.K., et al. Hum. Mutat. 30(7):1093-1103(2009)

Images



SCNN1B Antibody (Center) (Cat. #AP20003c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the SCNN1B antibody detected the SCNN1B protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.