

SCNN1A / ENaC Apha Antibody (aa182-459)

Rabbit Polyclonal Antibody Catalog # ALS16889

Specification

SCNN1A / ENaC Apha Antibody (aa182-459) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

IHC <u>P37088</u> <u>6337</u> Human Rabbit Polyclonal IgG 75704

SCNN1A / ENaC Apha Antibody (aa182-459) - Additional Information

Gene ID 6337

Other Names SCNN1A, Alpha hENaC, Alpha-NaCH, Alpha-ENaC, ENaCalpha, ENaCa, ENaC alpha, HENaC alpha, Alpha ENaC-2, SCNEA, SCNN1, BESC2

Target/Specificity Human ENaC alpha / SCNN1A

Reconstitution & Storage 0.1 M Tris-glycine, pH 7.0, 10% glycerol, 0.01% Thimerosal. Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Precautions SCNN1A / ENaC Apha Antibody (aa182-459) is for research use only and not for use in diagnostic or therapeutic procedures.

SCNN1A / ENaC Apha Antibody (aa182-459) - Protein Information

Name SCNN1A

Synonyms SCNN1

Function

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 eccrine sweat glands. Also plays a role in taste perception.



Cellular Location

Apical cell membrane; Multi-pass membrane protein {ECO:000250|UniProtKB:P37089}. Cell projection, cilium. Cytoplasmic granule. Cytoplasm Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:P37089}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:P37089}. Note=In the oviduct and bronchus, located on cilia in multi-ciliated cells. In endometrial non-ciliated epithelial cells, restricted to apical surfaces. In epidermis, located nearly uniformly in the cytoplasm in a granular distribution (PubMed:28130590). In sebaceous glands, observed only in the cytoplasmic space in between the lipid vesicles (PubMed:28130590). In eccrine sweat glands, mainly located at the apical surface of the cells facing the lumen (PubMed:28130590). In skin, in arrector pili muscle cells and in adipocytes, located in the cytoplasm and colocalized with actin fibers (PubMed:28130590). In spermatogonia, spermatocytes and round spermatids, located in the cytoplasm (By similarity). Prior to spermiation, location shifts from the cytoplasm to the spermatid tail (By similarity). In spermatozoa, localizes at the acrosome and the central region of the sperm flagellum (By similarity) {ECO:0000250|UniProtKB:P37089, ECO:0000269|PubMed:22207244, ECO:0000269|PubMed:24124190, ECO:0000269|PubMed:28130590}

Tissue Location

Expressed in the female reproductive tract, from the fimbrial end of the fallopian tube to the endometrium (at protein level) (PubMed:22207244). Expressed in kidney (at protein level). In the respiratory tract, expressed in the bronchial epithelium (at protein level). Highly expressed in lung. Detected at intermediate levels in pancreas and liver, and at low levels in heart and placenta (PubMed:22207244). in skin, expressed in keratinocytes, melanocytes and Merkel cells of the epidermal sub-layers, stratum basale, stratum spinosum and stratum granulosum (at protein level) (PubMed:28130590) Expressed in the outer root sheath of the hair follicles (at protein level) (PubMed:28130590). Detected in both peripheral and central cells of the sebaceous gland (at protein level) (PubMed:28130590). In skin, also expressed by arrector pili muscle cells and intradermal adipocytes (PubMed:28130590). Isoform 1 and isoform 2 predominate in all tissues Expression of isoform 3, isoform 4 and isoform 5 is very low or not detectable, except in lung and heart (PubMed:9575806)

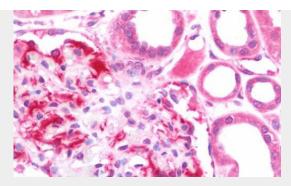
Volume 50 μl

SCNN1A / ENaC Apha Antibody (aa182-459) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SCNN1A / ENaC Apha Antibody (aa182-459) - Images



Anti-SCNN1A / ENaC Apha antibody IHC staining of human kidney. SCNN1A / ENaC Apha Antibody (aa182-459) - 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.

SCNN1A / ENaC Apha Antibody (aa182-459) - References

Voilley N., et al. Proc. Natl. Acad. Sci. U.S.A. 91:247-251(1994). McDonald F.J., et al.Am. J. Physiol. 266:L728-L734(1994). Ludwig M., et al.Hum. Genet. 102:576-581(1998). Chow Y.H., et al.Pediatr. Res. 46:208-214(1999). Bangel N., et al.J. Cyst. Fibros. 7:197-205(2008).