

**SCNN1A Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8804C**

**Specification**

**SCNN1A Antibody (Center) - Product Information**

Application	<b>IF, WB, IHC-P, FC,E</b>
Primary Accession	<a href="#">P37088</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit Ig</b>
Antigen Region	<b>365-391</b>

**SCNN1A Antibody (Center) - Additional Information**

**Gene ID** 6337

**Other Names**

Amiloride-sensitive sodium channel subunit alpha, Alpha-NaCH, Epithelial Na(+) channel subunit alpha, Alpha-ENaC, ENaCA, Nonvoltage-gated sodium channel 1 subunit alpha, SCNEA, SCNN1A, SCNN1

**Target/Specificity**

This SCNN1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 365-391 amino acids from the Central region of human SCNN1A.

**Dilution**

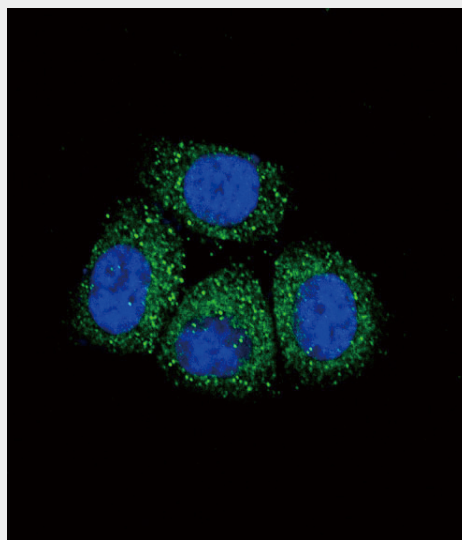
IF~~1:10~50  
WB~~1:2000  
IHC-P~~1:10~50  
FC~~1:25

**Format**

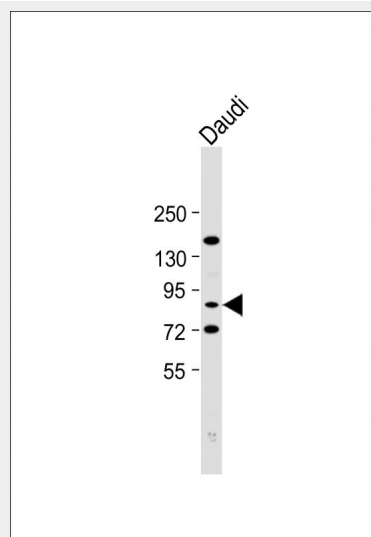
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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



Confocal immunofluorescent analysis of SCNN1A Antibody (Center) (Cat. #AP8804c) with Hela cell followed by Alexa Fluor 489-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



Anti-SCNN1A Antibody (Center) at 1:2000 dilution + Daudi whole cell lysate  
Lysates/proteins at 20 µg per lane.  
Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.

cycles.

### Precautions

SCNN1A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### SCNN1A Antibody (Center) - Protein Information

**Name** SCNN1A

**Synonyms** SCNN1

### Function

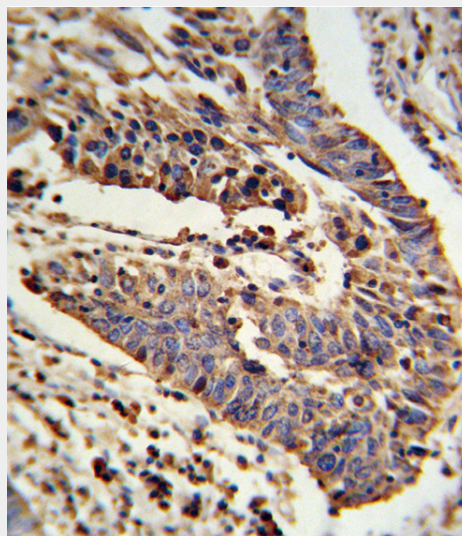
Sodium permeable non-voltage-sensitive ion channel inhibited by the diuretic amiloride. Mediates the electrodiffusion of the luminal sodium (and water, which follows osmotically) through the apical membrane of epithelial cells. Plays an essential role in electrolyte and blood pressure homeostasis, but 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

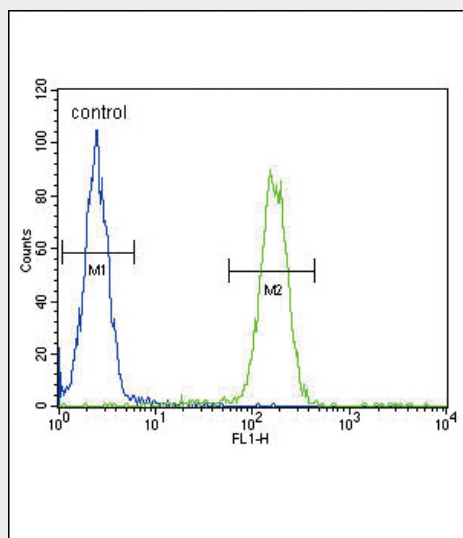
Apical cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P37089}. Cell projection, cilium. Cytoplasmic granule. Cytoplasm Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:P37089}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:P37089}. Note=In the oviduct 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

Predicted band size : 76 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human lung carcinoma reacted with SCNN1A Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



SCNN1A Antibody (Center) (Cat. #AP8804c) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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}

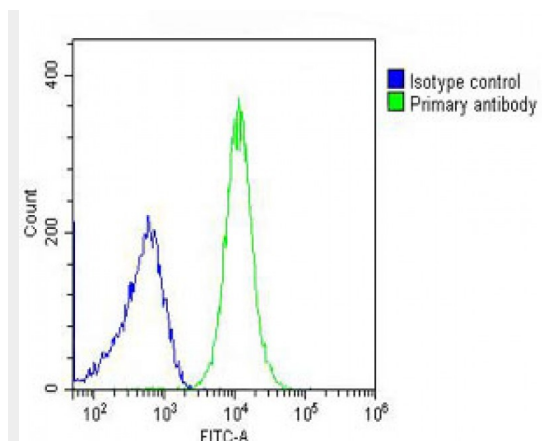
### Tissue Location

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). Expressed by eccrine sweat glands (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)

### SCNN1A Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



Overlay histogram showing WiDr cells stained with AP8804c (green line). The cells were fixed with 2% paraformaldehyde (10 min). The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP8804c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

### SCNN1A Antibody (Center) - 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 alpha subunit, and mutations in this gene have been associated with pseudohypoaldosteronism type 1 (PHA1), a rare salt wasting disease resulting from target organ unresponsiveness to mineralocorticoids.

### SCNN1A Antibody (Center) - References

Azad A.K., et.al., Hum. Mutat. 30:1093-1103(2009).