

SCNN1D Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54227

Specification

SCNN1D Polyclonal Antibody - Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	P51172
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SCNN1D
Epitope Specificity	451-550/638
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; multi-pass membrane protein
SIMILARITY	Belongs to the glutamate-gated ion channel (TC 1.A.10.1) family. NR2B/GRIN2B subfamily.
SUBUNIT	Forms heteromeric channel of a zeta subunit (GRIN1), a epsilon subunit (GRIN2A, GRIN2B, GRIN2C or GRIN2D) and a third subunit (GRIN3A or GRIN3B). Found in a complex with GRIN1 and GRIN3B. Found in a complex with GRIN1, GRIN3A and PPP2CB. Interacts with PDZ domains of INADL and DLG4. Interacts with HIP1 and NETO1 (By similarity). Interacts with MAGI3. Interacts with DAPK1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

SCNN1D is a subunit of the epithelial sodium channel (ENaC). ENaC has high sodium selectivity, low conductance, and amiloride sensitivity. The epithelial Na(+) channel (ENaC) regulates Na(+) homeostasis in cells and across epithelia; in the kidney, lung and colon it plays an essential role in trans-epithelial sodium and fluid balance. ENaC also mediates aldosterone-dependent sodium re-uptake in the distal nephron of the kidney, thus regulating blood pressure. Four homologous ENaC subunits (alpha, beta, gamma, and delta) have been isolated in mammals. Combination of alpha-, beta-, and gamma-subunits or delta-, beta-, and gamma-subunits forms fully functional channels. A delta subunit can replace the alpha subunit. However, the pharmacology, sensitivity to amiloride, conductance, and ionic selectivity of the delta/beta-gamma channel are different from those of the alpha/beta-gamma channel.

SCNN1D Polyclonal Antibody - Additional Information

Gene ID 6339

Other Names

Amiloride-sensitive sodium channel subunit delta, Delta-NaCH, Epithelial Na(+) channel subunit delta, Delta-ENaC, ENaCD, Nonvoltage-gated sodium channel 1 subunit delta, SCNED, SCNN1D, DNACH

Target/Specificity

Primarily found in the fronto-parieto-temporal cortex and hippocampus pyramidal cells, lower expression in the basal ganglia.

Dilution

IHC-P~~N/A
IHC-F~~N/A
IF~~1:50~200
ICC~~N/A
E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

SCNN1D Polyclonal Antibody - Protein Information

Name SCNN1D ([HGNC:10601](#))

Function

Potential alternative pore-forming subunit of the epithelial sodium channel (ENaC), capable of replacing the alpha/SCNN1A subunit, creating a more active channel with distinct properties (PubMed:16423824, PubMed:19520916, PubMed:22505667). ENaC functions in epithelial tissues, where it facilitates the electrodiffusion of sodium ions from the extracellular fluid through the apical membrane of cells, with water following osmotically, regulating sodium balance and fluid homeostasis (PubMed:16423824, PubMed:19520916, PubMed:7499195). This subunit could also function independently as a sodium channel or assemble into other tissue-specific heterotrimeric sodium channels (PubMed:7499195).

Cellular Location

Apical cell membrane; Multi-pass membrane protein

Tissue Location

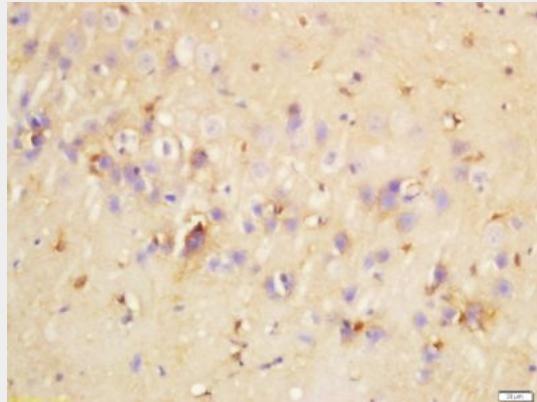
Not specifically expressed in epithelial cells.

SCNN1D Polyclonal Antibody - 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](#)

SCNN1D Polyclonal Antibody - Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-SCNN1D Polyclonal Antibody, Unconjugated(bs-10141R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining