

Datasheet for ABIN863202

**anti-SCNN1A antibody (AA 46-68)**

4 Images

19 Publications

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## Overview

Quantity:	100 µg
Target:	SCNN1A
Binding Specificity:	AA 46-68
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SCNN1A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP), Immunocytochemistry (ICC)

## Product Details

Immunogen:	Produced against a synthetic peptide mapping to the N-terminal of the alpha subunit (amino acids 46-68) of rat Alpha ENaC (antibody designation 3560-2).
Specificity:	Detects ~85 kDa.
Cross-Reactivity:	Human, Mouse, Rat, Xenopus laevis
Purification:	Protein A Purified

## Target Details

Target:	SCNN1A
Alternative Name:	ENaC ( <a href="#">SCNN1A Products</a> )

## Target Details

**Background:** The Epithelial Sodium Channel (ENaC) is a membrane ion channel permeable to Na<sup>+</sup> ions. It is located in the apical plasma membrane of epithelia in the kidneys, lung, colon, and other tissues where it plays a role in trans epithelial Na<sup>+</sup>-ion transport (1). Specifically Na<sup>+</sup> transport via ENaC occurs across many epithelial surfaces, and plays a key role in regulating salt and water absorption (2). ENaCs are composed of three structurally related subunits that form a tetrameric channel,  $\alpha$ ,  $\beta$ , and  $\gamma$ . The expression of its alpha and beta subunits is enhanced as keratinocytes differentiate (3, 4). The beta and gamma-ENaC subunits are essential for edema fluid to exert its maximal effect on net fluid absorption by distal lung epithelia(5). And it has been concluded that the subunits are differentially expressed in the retina of mice with ocular hypertension, therefore the up-regulation of alpha-ENaC proteins could serve as a protection mechanism against elevated intraocular pressure (6).

**Gene ID:** 25122

**NCBI Accession:** [NP\\_113736](#)

**UniProt:** [Q6IRJ1](#)

## Application Details

**Application Notes:**

- WB (1:1000)
- ICC/IF (1:400)
- IHC (1:25)
- optimal dilutions for assays should be determined by the user.

**Comment:** 1 µg/ml of ABIN863202 was sufficient for detection of alpha-ENaC in 35 µg of rat kidney tissue lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

**Restrictions:** For Research Use only

## Handling

**Format:** Liquid

**Concentration:** 1 mg/mL

**Buffer:** PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

**Preservative:** Sodium azide

**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Handling

Storage: -20 °C

Storage Comment: -20°C

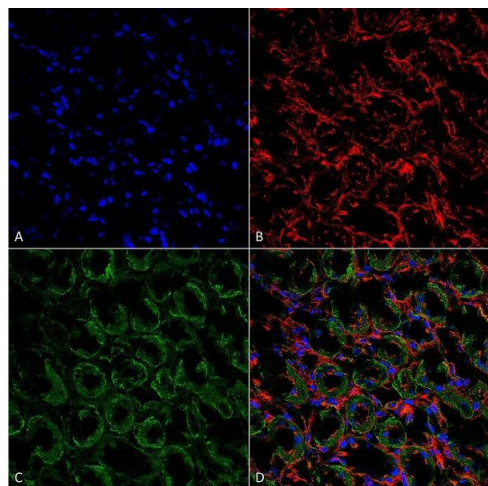
## Publications

Product cited in: Voth, Gwin, Francis, Balczon, Frank, Pittet, Wagener, Moser, Alexeyev, Housley, Audia, Piechocki, Madera, Simmons, Crawford, Stevens: "Virulent *Pseudomonas aeruginosa* infection converts antimicrobial amyloids into cytotoxic prions." in: **FASEB journal : official publication of the Federation of American Societies for Experimental Biology**, Vol. 34, Issue 7, pp. 9156-9179, (2020) ([PubMed](#)).

Epelbaum, Youssef, Lacor, Chaurand, Duplus, Brugg, Duyckaerts, Delatour: "Acute amnestic encephalopathy in amyloid- $\beta$  oligomer-injected mice is due to their widespread diffusion in vivo." in: **Neurobiology of aging**, Vol. 36, Issue 6, pp. 2043-52, (2015) ([PubMed](#)).

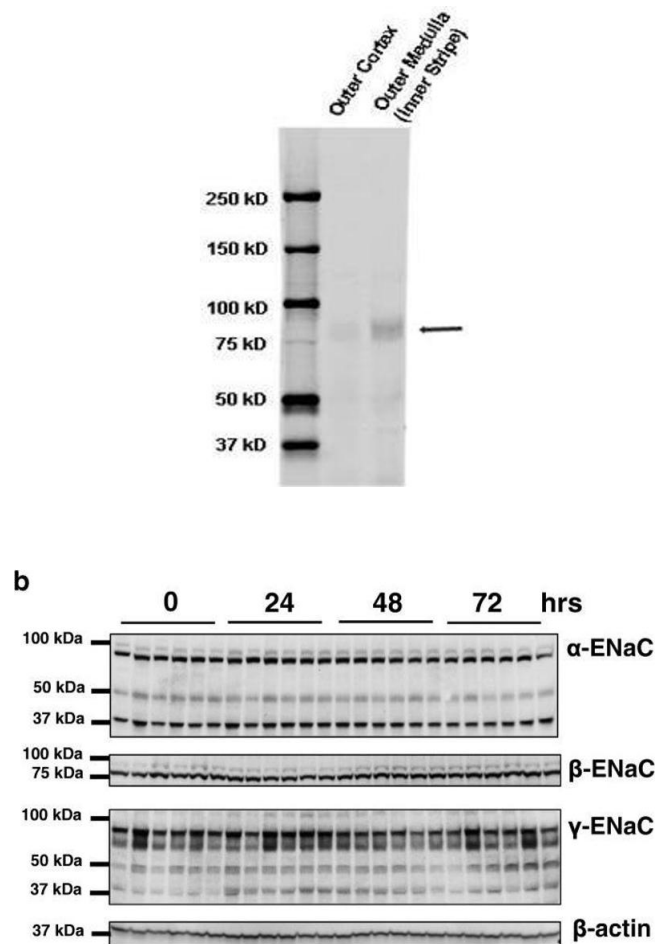
There are more publications referencing this product on: [Product page](#)

## Images



### Immunohistochemistry

**Image 1.** Immunohistochemistry analysis using Rabbit Anti-ENaC Polyclonal Antibody (ABIN863202). Tissue: kidney tissue. Species: Rat. Fixation: Formalin Fixed Paraffin-Embedded. Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ABIN863202) at 1:25 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit IgG: Alexa Fluor 488. Counterstain: Actin-binding Phalloidin-Alexa Fluor 633, DAPI (blue) nuclear stain. Magnification: 63X. (A) DAPI (blue) nuclear stain. (B) Phalloidin Alex Fluor 633 F-Actin stain. (C) ENaC Antibody (D) Composite



**Image 2.** ENaC alpha, rat kidney tissue.

### Western Blotting

**Image 3.** The expression of ENaC subunits after preservation in UW solution. a RT-PCR analysis of mRNA expression of  $\alpha$ -,  $\beta$ -, and  $\gamma$ -ENaC subunits after cold static preservation in UW solution for different time points, n=6 kidneys (1 kidney/rat) in each group. b Western blot analysis of ENaC expression in kidney total lysates isolated from SD rats after cold static kidney preservation in UW solution for 0, 24, 48, and 72 h. Each lane represents one kidney - figure provided by CiteAb. Source: PMID31035971

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN863202.