

ENaC gamma Antibody

Catalog # ASM10481

### Specification

# ENaC gamma Antibody - Product Information

Application Primary Accession Other Accession Host Reactivity Clonality Format **Description** Rabbit Anti-Rat ENaC gamma Polyclonal

IHC, WB <u>P37091</u> <u>NP\_058742</u> Rabbit Human, Mouse, Rat, Hamster, Xenopus Polyclonal HRP

**Target/Specificity** Detects ~83kDa.

**Other Names** 

SCNN1G Antibody, Epithelial Sodium Channel gamma Antibody, Amiloride sensitive epithelial sodium channel gamma subunit Antibody, Amiloride sensitive sodium channel subunit gamma Antibody, Amiloride-sensitive sodium channel subunit gamma Antibody, BESC3 Antibody, ENaC gamma subunit Antibody, ENaCG Antibody, ENaCgamma Antibody, Epithelial Na(+) channel subunit gamma Antibody, Epithelial Na+ channel subunit gamma Antibody, Gamma ENaC Antibody, Gamma NaCH Antibody, Gamma-ENaC Antibody, Gamma-NaCH Antibody, Nonvoltage gated sodium channel 1 subunit gamma Antibody, SCNN 1G Antibody, SCNN1G Antibody, SCNN1G Antibody, Sodium channel non voltage gated 1 gamma subunit Antibody, Sodium channel nonvoltage gated 1 gamma Antibody

#### Immunogen

Produced against the C-terminal tail (amino acids 629-650) of rat gamma ENaC (antibody designation L550)

Purification Protein A Purified

Storage Storage Buffer PBS, 50% glycerol, 0.09% sodium azide -20ºC

Blue Ice or 4ºC

Shipping Temperature

**Certificate of Analysis** 1  $\mu$ g/ml of SPC-405 was sufficient for detection of gamma-ENaC in 20  $\mu$ g of rat kidney tissue lysate by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

Cellular Localization Apical Cell Membrane

### **ENaC gamma Antibody - 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
- <u>Cell Culture</u>

### ENaC gamma Antibody - Images



Immunohistochemistry analysis using Rabbit Anti-ENaC Polyclonal Antibody (ASM10481). Tissue: kidney tissue. Species: Rat. Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ASM10481) at 1:100. Secondary Antibody: FITC Goat Anti-Rabbit (green).



Western blot analysis of Rat kidney tissue lysates showing detection of ENaC protein using Rabbit Anti-ENaC Polyclonal Antibody (ASM10481). Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ASM10481) at 1:1000.





Western blot analysis of Mouse kidney cortex showing detection of ENaC protein using Rabbit Anti-ENaC Polyclonal Antibody (ASM10481). Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ASM10481) at 1:1000. Low-salt diet (lanes 1-4) compared to a high-salt diet (lanes 5-7). 70kDa degradation band observed in low-salt.

# ENaC gamma Antibody - Background

The Epithelial Sodium Channel (ENaC) is a membrane ion channel permeable to Na+ 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+-ion transport (1). Specifically Na+ 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).

# **ENaC gamma Antibody - References**

- 1. Kakizoe Y., et al. (2009) J Hpyertens. 27(8): 1679-1689.
- 2. Gu Y. (2008) J Cell Physiol. 216(2):453-457.
- 3. Bruns J.B. (2003) Am J Physiol Renal Physiol. 285(4): F600-F609.
- 4. Mauro T., et al. (2002) J Invest Dermatol. 118(4): 589-594.
- 5. Elias N., et al. (2007) Am J Physiol Lung Cell Mol Physiol. 293(3): L537-45.
- 6. Dyka F.M., May C.A. and Enz R. (2005) J Neurochem. 94(1): 120-128.