

**ENaC beta Antibody**  
**ENaC beta Antibody, Clone 16E4**  
**Catalog # ASM10165****Specification**

---

**ENaC beta Antibody - Product Information**

|                   |                           |
|-------------------|---------------------------|
| Application       | WB                        |
| Primary Accession | <a href="#">P37090</a>    |
| Other Accession   | <a href="#">NP_036780</a> |
| Host              | Mouse                     |
| Isotype           | IgG2a                     |
| Reactivity        | Mouse                     |
| Clonality         | Monoclonal                |
| Format            | ATTO 390                  |

**Description**

Mouse Anti-Rat ENaC beta Monoclonal IgG2a

**Target/Specificity**

Detects ~87kDa.

**Other Names**

SCNN1B Antibody, Amiloride sensitive sodium channel subunit beta Antibody, Amiloride-sensitive sodium channel beta-subunit Antibody, Beta ENaC Antibody, Beta NaCH Antibody, ENaC beta Antibody, ENaCB Antibody, Epithelial Na(+) channel subunit beta Antibody, Epithelial Na+ channel beta subunit Antibody, Epithelial Na+ channel subunit beta Antibody, Epithelial sodium channel beta 2 subunit Antibody, Epithelial sodium channel beta 3 subunit Antibody, Nonvoltage gated sodium channel 1 beta subunit Antibody, Nonvoltage gated sodium channel 1 subunit beta Antibody, Nonvoltage-gated sodium channel 1 beta subunit Antibody, SCNEB Antibody, SCNN 1B Antibody, Sodium channel nonvoltage gated 1 beta (Liddle syndrome) Antibody, Sodium channel nonvoltage gated 1 beta Antibody

**Immunogen**

Synthetic peptide from the C-terminal of Rat ENaC beta (aa. 617-638)

**Purification**

Protein G Purified

Storage **-20°C**

**Storage Buffer**

PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature

**Blue Ice or 4°C**

**Certificate of Analysis**

A 1:1000 dilution of SMC-241 was sufficient for detection of ENaC beta in 15 µg of Mouse whole kidney lysate by ECL immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

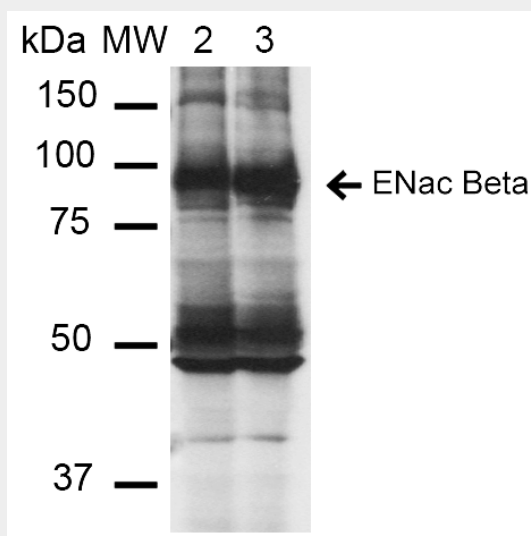
Apical Cell Membrane

## ENaC beta 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](#)

## ENaC beta Antibody - Images



Western Blot analysis of Mouse Whole kidney homogenates showing detection of ~87kDa ENaC beta protein using Mouse Anti-ENaC beta Monoclonal Antibody, Clone 16E4 (ASM10165). Lane 1: Molecular Weight Ladder (MW). Lane 2: Low-salt diet. Lane 3: Normal-salt diet. Load: 20  $\mu$ g. Primary Antibody: Mouse Anti-ENaC beta Monoclonal Antibody (ASM10165) at 1:1000. Predicted/Observed Size: ~87kDa.

## ENaC beta Antibody - Background

The Epithelial Sodium Channel (ENaC) is a membrane ion channel permeable to  $\text{Na}^+$  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  $\text{Na}^+$ -ion transport (1). Specifically  $\text{Na}^+$  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 beta Antibody - References

1. Kakizoe Y., et al. (2009) J Hypertens. 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.