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ENaC beta Antibody
Catalog # ASM10480

Specification

ENaC beta Antibody - Product Information

Application	**IHC, WB**
Primary Accession	P37090
Other Accession	NP_036780
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat, Hamster, Xenopus**
Clonality	**Polyclonal**

Description
Rabbit Anti-Rat ENaC beta Polyclonal

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
Produced against the C-terminal tail (amino acids 617-638) of rat beta ENaC (antibody designation 3755-2)

Purification
Protein A Purified

Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SPC-404 was sufficient for detection of beta-ENaC in 20 µg 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 beta Antibody - Protocols

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

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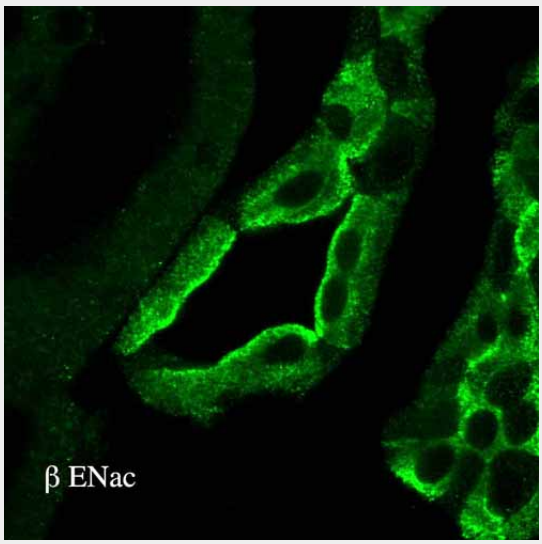
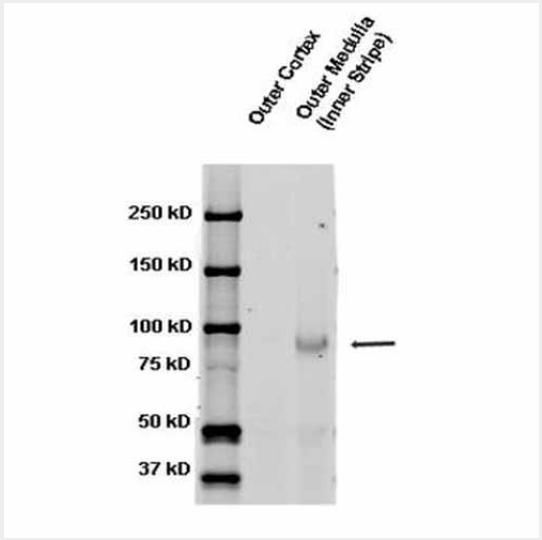
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ENaC beta Antibody - Images



Immunohistochemistry analysis using Rabbit Anti-ENaC Polyclonal Antibody (ASM10480). Tissue: kidney tissue. Species: Rat. Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ASM10480) 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 (ASM10480). Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ASM10480) at 1:1000.

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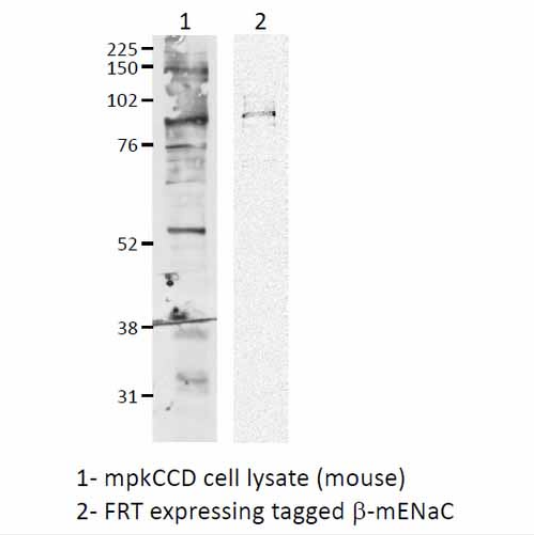
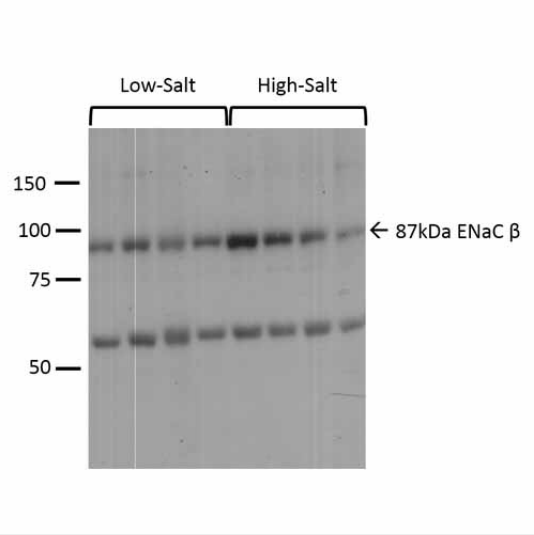


Western blot analysis of Mouse mpkCCD cell lysates showing detection of ENaC protein using Rabbit Anti-ENaC Polyclonal Antibody (ASM10480). Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ASM10480) at 1:1000.



Western blot analysis of Mouse kidney cortex showing detection of ENaC protein using Rabbit Anti-ENaC Polyclonal Antibody (ASM10480). Primary Antibody: Rabbit Anti-ENaC Polyclonal Antibody (ASM10480) at 1:1000. Low-salt diet (lanes 1-4) compared to a high-salt diet (lanes 5-8).

ENaC beta 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, α, β, and γ. 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 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.