Datasheet for ABIN7043635

anti-SCNN1B antibody (Extracellular)

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Overview

Quantity:	25 µL
Target:	SCNN1B
Binding Specificity:	AA 498-513, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SCNN1B antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to ENaCβ Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: EFNYRTIEESPANNI(C), corresponding to amino acid residues 498-513 of rat ENaCbeta
Isotype:	IgG
Specificity:	Extracellular
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Mouse - identical, human - 14,15 amino acid residues identical
Characteristics:	Anti-ENaC β (SCNN1B) (extracellular) Antibody (ABIN7043635, ABIN7045245 and ABIN7045246) is a highly specific antibody directed against an epitope of the rat protein. The

Product Details

	antibody can be used in western blot and immunohistochemistry applications. It has been designed to recognize ENaCβ from rat, human, and mouse samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	SCNN1B
Alternative Name:	SCNN1B (SCNN1B Products)
Background:	Amiloride-sensitive sodium channel subunit beta, Beta-NaCH, Epithelial sodium channel β subunit, Beta-ENaC, Nonvoltage-gated sodium channel 1 subunit beta, SCNEB,The amiloride-sensitive epithelial Na+ channel (ENaC) family includes 4 members: ENaCα, β, γ and δ. The ENaC subunits have a conserved topology consisting of two membrane-spanning domains with intracellular N and C-termini and a large glycosylated extracellular region.The functional ENaC channel is a heteromer with a presumed stoichiometry of α2βγ while the δ subunit can substitute for the α subunit in some tissues. Interestingly, neither the β nor the γ subunits are capable of producing any current when expressed alone in heterologous systems, while in these systems the simultaneous presence of all three ENaC subunits will produce Na+ currents that resemble the endogenous channel. The ENaC channel is located in the luminal (apical) plasma membrane of several epithelial tissues such as kidney, lung, salivary glands and skin where it enables entry of Na+ into the cell along its electrochemical gradient and thus has a central role in the maintenance of renal Na+ balance as well as liquid balance in the lung. The central role of ENaC in the regulation of Na+ homeostasis and hence blood pressure is underscored by the identification of two human diseases that arise from either gain- or loss-of-function mutations of the ENaC channel. Liddle's syndrome is an inherited form of hypertension that stems from a dominant mutation of the ENaC channel (in either the β or γ subunits) that results in excessive activity of the channel and hence increased Na+ absorption. Conversely, pseudoaldosteronism type I (PHA) is a dysfunction characterized by hypotension due to poor Na+ absorption that is associated with loss-of-function mutations which may occur in each of the three ENaC subunits. Alternative names: ENaC beta (SCNN1B), Amiloride-sensitive sodium channel subunit beta, Beta-NaCH, Epithelial sodium channel beta subunit, Beta-ENaC, Nonvoltage-gated sodium channel 1 subunit beta, SCNEB
Gene ID:	24767

Target Details

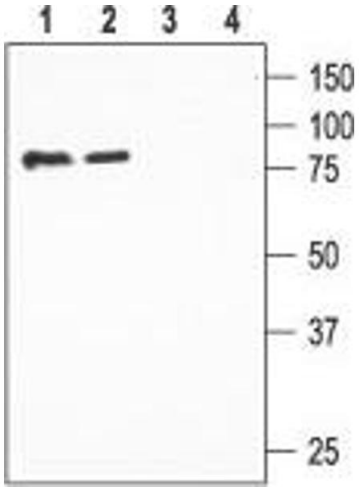
NCBI Accession:	NM_000336
UniProt:	P37090

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:200
Comment:	Negative Control: (ABIN7236827) Blocking Peptide: (ABIN7236827)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Western Blotting

Image 1. Western blot analysis of rat kidney (lanes 1 and 3) and lung (lanes 2 and 4) lysates: - 1,2. Anti-ENaC β (SCNN1B) (extracellular) Antibody (ABIN7043635, ABIN7045245 and ABIN7045246), (1:200).3,4. Anti-ENaC β (SCNN1B) (extracellular) Antibody, preincubated with ENaC β/SCNN1B (extracellular) Blocking Peptide (#BLP-SC019).