

## Product datasheet for **TA329042**

### Scnn1b Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide EFNYRTIEESPANNI(C), corresponding to amino acid residues 498-513 of rat ENaC $\alpha$ ?. Extracellular.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN <sub>3</sub> .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	sodium channel epithelial 1 beta subunit
Database Link:	<a href="#">NP_036780</a> <a href="#">Entrez Gene 20277 Mouse</a> <a href="#">Entrez Gene 24767 Rat</a> <a href="#">P37090</a>



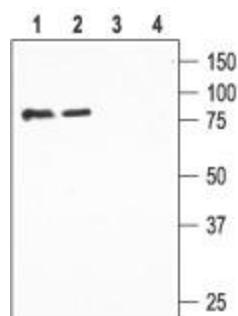
[View online »](#)

**Background:**

The amiloride-sensitive epithelial Na<sup>+</sup> channel (ENaC) family includes 4 members: ENaC $\alpha$ ,  $\beta$ ,  $\gamma$  and  $\delta$ . 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  $\alpha 2\beta\gamma$  while the  $\delta$  subunit can substitute for the  $\alpha$  subunit in some tissues. Interestingly, neither the  $\beta$  nor the  $\gamma$  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<sup>+</sup> 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<sup>+</sup> into the cell along its electrochemical gradient and thus has a central role in the maintenance of renal Na<sup>+</sup> balance as well as liquid balance in the lung. The central role of ENaC in the regulation of Na<sup>+</sup> 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  $\beta$  or  $\gamma$  subunits) that results in excessive activity of the channel and hence increased Na<sup>+</sup> absorption. Conversely, pseudoaldosteronism type I (PHA) is a dysfunction characterized by hypotension due to poor Na<sup>+</sup> absorption that is associated with loss-of-function mutations which may occur in each of the three ENaC subunits.

**Synonyms:**

BESC1; Beta-ENaC; Beta-NaCH; ENaCb; ENaCb $\beta$ ; SCNEB

**Product images:**


Western blot analysis of rat kidney (lanes 1 and 3) and lung (lanes 2 and 4) lysates: 1, 2. Anti-EnaC $\beta$  antibody, (1:200). 3, 4. Anti-EnaC $\beta$  antibody, preincubated with the control peptide antigen.