

Product datasheet for **TA328913**

Slc9a2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)RASEPGNRKGRLGNEK, corresponding to amino acid residues 797-812 of rat NHE-2 . Intracellular, C-terminus.
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, 0.05% NaN ₃ .
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:	solute carrier family 9 member A2
Database Link:	NP_036785 Entrez Gene 6549 Human Entrez Gene 226999 Mouse Entrez Gene 24783 Rat P48763



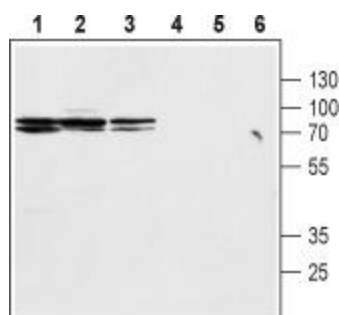
[View online »](#)

Background:

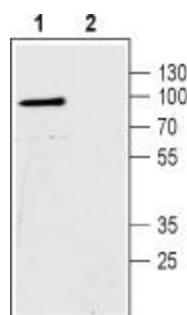
In order to function in optimal conditions, cells must maintain a close to neutral intracellular pH. They have adopted various mechanisms in order to do so, one of which is via Na⁺/H⁺ exchangers (NHEs). Genes belonging to this group are expressed along a very broad range of organisms and are essential for protecting cells against intracellular acidification. To date, nine genes have been identified in mammals; NHE1-9. These membrane proteins have 10-12 transmembrane domains depending on whether a splice variant is expressed and an intracellular N-terminal. The C-terminal domain can be either intracellular or extracellular, also depending whether a splice variant of the protein is involved. The C-terminal part of the protein also undergoes posttranslational modification such as phosphorylation. Both NHE-1 and NHE-2 have an extracellular loop which is glycosylated. Under physiological conditions, the Na⁺/H⁺ exchanger mediates the exchange of one extracellular Na⁺ ion for one intracellular proton, thereby keeping the overall charge neutral¹. The extracellular binding site of Na⁺ is not selective as it can also bind Li⁺ and H⁺, K⁺ ions inhibit NHE-1 but have no effect on NHE-2. The activation of NHE-1 and NHE-2 is sensitive to intracellular acidic pH. Under physiological conditions, both exchangers are not active and upon a drop of intracellular pH, they are rapidly activated. NHE-2 is detected in the intestine, kidney and parietal cells. It is also detected in skeletal muscle and testis.

Synonyms:

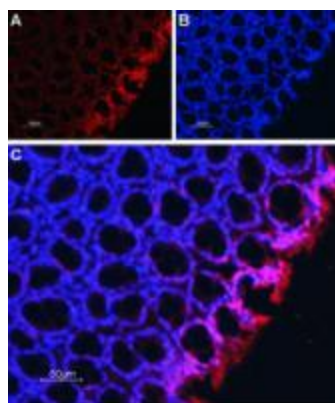
NHE-2; NHE2

Product images:


Western blot analysis of rat kidney membranes (lanes 1 and 4), mouse kidney lysate (lanes 2 and 5) and rat stomach lysate (lanes 3 and 6): 1-3. Anti-Na⁺/H⁺ Exchanger 2 (NHE-2) antibody, (1:200). 4-6. Anti-Na⁺/H⁺ Exchanger 2 (NHE-2) antibody, preincubated with the control peptide antigen.



Western blot analysis of human Colo-205 colorectal carcinoma cell lysates: Western blot analysis of human Colo-205 colorectal carcinoma cell lysates: 1. Anti-Na⁺/H⁺ Exchanger 2 (NHE-2) antibody, (1:200). 2. Anti-Na⁺/H⁺ Exchanger 2 (NHE-2) antibody, preincubated with the control peptide antigen.



Expression of Na⁺/H⁺ Exchanger 2 (NHE-2) in rat colon. Immunohistochemical staining of rat colon sections (paraffin-embedded) using Anti-Na⁺/H⁺ Exchanger 2 (NHE-2) antibody, (1:50). A. NHE-2 staining is shown in red. B. Cell nuclei were labeled with DAPI (blue). C. Merge of the two images.