

Datasheet for ABIN7043758

anti-SLC9A3 antibody (Intracellular)



[Go to Product page](#)

2 Images

Overview

Quantity:	25 µL
Target:	SLC9A3
Binding Specificity:	AA 466-479, Intracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SLC9A3 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Na ⁺ /H ⁺ Exchanger 3 (NHE-3)
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)EQREPKLNEKLHGR, corresponding to amino acid residues 466-479 of rat NHE-3
Isotype:	IgG
Specificity:	Intracellular, C-terminus
Cross-Reactivity:	Human, Rat
Predicted Reactivity:	14 amino acid residues identical, Mouse - 13, human - 12
Characteristics:	Anti-Na ⁺ /H ⁺ Exchanger 3 Antibody is directed against an epitope of rat . Anti-Na ⁺ /H ⁺ Exchanger 3 Antibody (ABIN7043758, ABIN7044881 and ABIN7044882) can be used in western

Product Details

blot analysis. It has been designed to recognize from human, mouse and rat samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: SLC9A3

Alternative Name: SLC9A3 ([SLC9A3 Products](#))

Background: Sodium/hydrogen exchanger 3, SLC9A3, Maintaining physiological intracellular pH values is vital for most cells. The Na⁺/H⁺ exchanger family (NHE, also known as SLC9) is widely expressed and has a key role in protecting cells against acidification. There are currently six NHE transporters identified in mammalian cells¹. The complete structure of members of the NHE family has not been completely solved. However, all members are organized in a similar manner with 11 or 12 membrane spanning domains, carrying out the Na⁺ and H⁺ exchange and a varying length intracellular C-terminal domain being involved in regulation of the exchange activity. The transport of Na⁺ and H⁺ in NHEs occurs in the center of the N-terminus via a two inverted funnel area that is made up of two transmembrane regions. NHE3 is expressed in sodium absorptive cells of the mammalian small intestine, colon, gall bladder, renal proximal tubule, and thick and thin limbs of the loop of Henle and can be mostly found in the plasma membrane². NHE3 interacts with a multi-PDZ domain-containing scaffold protein called NHERF-1. NHERF-1 binds to the NHE3 C-terminus and has a role in NHE3 regulation in various cells. NHERF-1 functions as a cofactor required for the phosphorylation and downregulation of NHE3 activity in response to elevated intracellular cAMP³. In addition, silencing of NHERF-1 in a model of diabetic mice was found to prevent NHE3 trafficking and insulin-dependent activation⁴.

Alternative names: Na⁺/H⁺ Exchanger 3 (NHE-3), Sodium/hydrogen exchanger 3, SLC9A3

Gene ID: 24784

NCBI Accession: [NM_004174](#)

UniProt: [P26433](#)

Pathways: [Proton Transport](#)

Application Details

Application Notes: Antigen preadsorption control: 1 µg peptide per 1 µg antibody

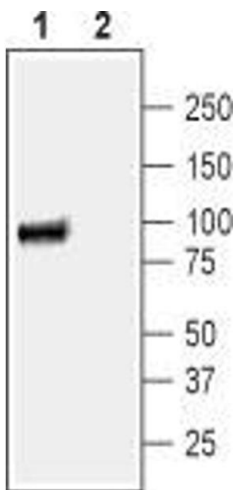
Application Details

	Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A
	Application Dilutions Western blot wb: 1:200
Comment:	Negative Control: (ABIN7237211) Blocking Peptide: (ABIN7237211)
Restrictions:	For Research Use only

Handling

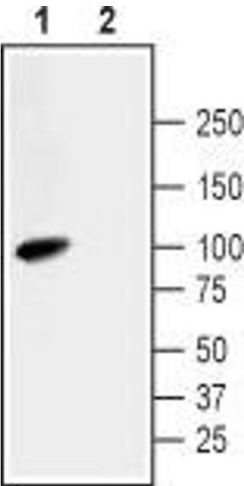
Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after 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).

Images



Western Blotting

Image 1. Western blot analysis of human Colo-205 colon adenocarcinoma cell lysate: - 1. Anti-Na⁺/H⁺ Exchanger 3 (NHE-3) Antibody (ABIN7043758, ABIN7044881 and ABIN7044882), (1:200).2. Anti-Na⁺/H⁺ Exchanger 3 (NHE-3) Antibody, preincubated with Na⁺/H⁺ Exchanger 3/NHE-3 Blocking Peptide (#BLP-NX033).



Western Blotting

Image 2. Western blot analysis of rat small intestine lysate: -
1. Anti-Na⁺/H⁺ Exchanger 3 (NHE-3) Antibody (ABIN7043758, ABIN7044881 and ABIN7044882), (1:200). 2. Anti-Na⁺/H⁺ Exchanger 3 (NHE-3) Antibody, preincubated with Na⁺/H⁺ Exchanger 3/NHE-3 Blocking Peptide (#BLP-NX033).