



Rabbit Anti-phospho-NHE3 (Ser552) antibody

SL9582R

Product Name:	phospho-NHE3 (Ser552)
Chinese Name:	磷酸化钠离子/氢离子Exchange protein3抗体
Alias:	p-NHE-3; Sodium / Hydrogen Exchanger 3 (phospho S552); Na(+)/H(+) exchanger 3; NHE 3; NHE-3; NHE3; SL9A3_HUMAN; SLC9A 3; Slc9a3; Sodium/hydrogen exchanger 3; Sodium/hydrogen exchanger, apical epithelial; Solute carrier family 9 (sodium/hydrogen exchanger), isoform 3; Solute carrier family 9 (sodium/hydrogen exchanger), member 3; Solute carrier family 9 member 3; MGC126718; MGC126720.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	93kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from rat NHE-3 around the phosphorylation site of Ser552 (human Ser555):RG(p-S)LA
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	NHE-3 are integral membrane proteins that are expressed in most mammalian tissues,

where they regulate intracellular pH and cell volume. NHEs mediate the transport of hydrogen (H^+) ions out of cells in exchange for extracellular sodium (Na^+) ions. While NHE-1 is ubiquitously expressed, the NHE isoforms 2-8 have distinct tissue- and cell type-dependent expression and inhibitory characteristics. NHE-3 localizes to the apical membrane of renal proximal tubules where it is responsible for most of the sodium transport and fluid reabsorption. NHE-3 translocates to internal pools where it mediates natriuresis when blood pressure increases abruptly. NHE-3 is also expressed in the stomach and functions to protect the mucosa by secreting protons that diffuse into the mucous cells.

Function:

Involved in pH regulation to eliminate acids generated by active metabolism or to counter adverse environmental conditions. Major proton extruding system driven by the inward sodium ion chemical gradient. Plays an important role in signal transduction.

Subunit:

Binds SLC9A3R1 and SLC9A3R2. Interacts with CHP1, CHP2 and SHANK2. Interacts with PDZD3 and interactions decrease in response to elevated calcium ion levels

Subcellular Location:

Membrane. In intestinal epithelial cells, localizes to the ileal brush border.

Post-translational modifications:

Phosphorylated by PKA, which inhibits activity.

Similarity:

Belongs to the monovalent cation:proton antiporter 1 (CPA1) transporter (TC 2.A.36) family.

SWISS:

P48764

Gene ID:

24784

Database links:

[Entrez Gene: 6550](#)Human

[Entrez Gene: 24784](#)Rat

[Omim: 182307](#)Human

[SwissProt: P48764](#)Human

[SwissProt: P26433](#)Rat

[Unigene: 658120](#)Human

[Unigene: 9706](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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