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Anti-NHE8 Antibody
Rabbit polyclonal antibody to NHE8
Catalog # AP60781

Specification

Anti-NHE8 Antibody - Product Information

Application	**WB, IF/IC, IHC**
Primary Accession	Q9Y2E8
Reactivity	**Human, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**65422**

Anti-NHE8 Antibody - Additional Information

Gene ID 23315

Other Names
KIAA0939; NHE8; Sodium/hydrogen exchanger 8; Na(+)/H(+) exchanger 8; NHE-8; Solute carrier family 9 member 8

Target/Specificity
Recognizes endogenous levels of NHE8 protein.

Dilution
WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)
IF/IC~~N/A
IHC~~1:100~500

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-NHE8 Antibody - Protein Information

Name SLC9A8 (HGNC:20728)

Synonyms KIAA0939, NHE8

Function
Na(+)/H(+) antiporter. Mediates the electoneutral exchange of intracellular H(+) ions for extracellular Na(+) in 1:1 stoichiometry (PubMed:15522866). Acts as an Na(+)/H(+) exchanger in the trans-Golgi. Contributes to the regulation of pH regulation of Golgi apparatus, and consequently, in protein trafficking and endosomal morphology (PubMed:<a

href="http://www.uniprot.org/citations/15522866" target="_blank">15522866, PubMed:20719963). In germ cells, plays a crucial role in acrosome biogenesis and sperm development, probably by playing a role in the fusion of the Golgi-derived vesicles that form the acrosomal cap (By similarity). Can also be active at the cell surface of specialized cells. In the small intestine, at the cell membrane, plays a major physiological role in transepithelial absorption of Na(+) and regulates intracellular pH homeostasis of intestinal epithelial cells (PubMed:34288721). Acts as an important regulator of mucosal integrity in the intestine and in the stomach, could mediate the pH fluctuation necessary for mucin exocytosis or assist membrane trafficking of other proteins (By similarity). Plays a role in photoreceptor survival and in the maintenance of intracellular pH homeostasis in retinal pigment epithelium (RPE cells) (By similarity).

Cellular Location
Golgi apparatus membrane; Multi-pass membrane protein. Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein. Endosome, multivesicular body membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:Q8R4D1} Note=Intracellular versus plasma membrane-resident location may vary with cell type. Mainly localized to the mid- to trans-Golgi compartments but a proportion is also localized to multivesicular bodies (PubMed:15522866, PubMed:20719963). Localized at the apical membrane of polarized gastrointestinal epithelial cells (By similarity). Recruitment to the plasma membrane upon acid stimulation (By similarity). {ECO:0000250|UniProtKB:Q4L208, ECO:0000269|PubMed:15522866, ECO:0000269|PubMed:20719963}

Tissue Location
Ubiquitous. Strongly expressed in skeletal muscle and kidney (PubMed:15522866). Detected throughout the entire gastrointestinal tract, with high expression detected in stomach, duodenum and ascending colon (PubMed:18209477)

Anti-NHE8 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NHE8 Antibody - Images

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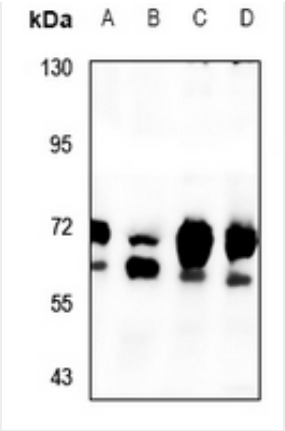
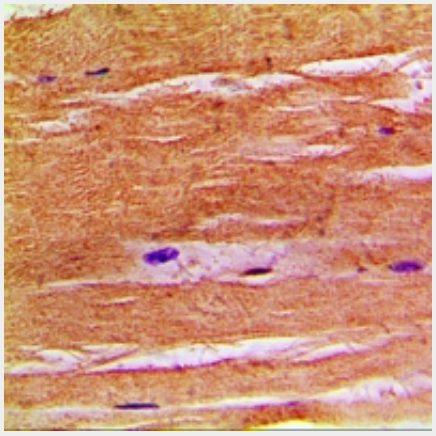
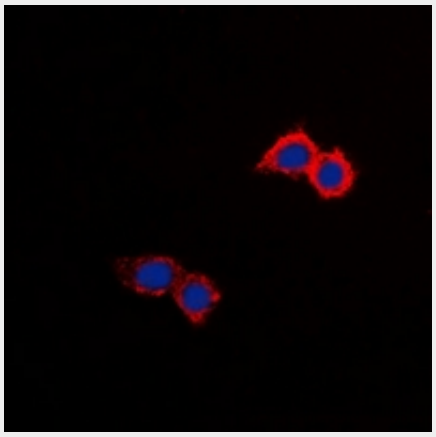


Western blot analysis of NHE8 expression in HepG2 (A), U87MG (B), HEK293T (C), LO2 (D) whole cell lysates.



Immunohistochemical analysis of NHE8 staining in human skeletal muscle formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of NHE8 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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Anti-NHE8 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human NHE8. The exact sequence is proprietary.