

## SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10)

Mouse Monoclonal Antibody Catalog # ALS11989

## **Specification**

# SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) - Product Information

Application IHC
Primary Accession O14745
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 39kDa KDa

## SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) - Additional Information

### **Gene ID 9368**

#### **Other Names**

Na(+)/H(+) exchange regulatory cofactor NHE-RF1, NHERF-1, Ezrin-radixin-moesin-binding phosphoprotein 50, EBP50, Regulatory cofactor of Na(+)/H(+) exchanger, Sodium-hydrogen exchanger regulatory factor 1, Solute carrier family 9 isoform A3 regulatory factor 1, SLC9A3R1, NHERF, NHERF1

### Target/Specificity

Bacterially produced recombinant full-length human NHERF

### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

### **Precautions**

SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) is for research use only and not for use in diagnostic or therapeutic procedures.

# SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) - Protein Information

Name NHERF1 (HGNC:11075)

Synonyms NHERF, SLC9A3R1

### **Function**

Scaffold protein that connects plasma membrane proteins with members of the ezrin/moesin/radixin family and thereby helps to link them to the actin cytoskeleton and to regulate their surface expression. Necessary for recycling of internalized ADRB2. Was first known to play a role in the regulation of the activity and subcellular location of SLC9A3. Necessary for cAMP-mediated phosphorylation and inhibition of SLC9A3. May enhance Wnt signaling. May participate in HTR4 targeting to microvilli (By similarity). Involved in the regulation of phosphate reabsorption in the renal proximal tubules. Involved in sperm capacitation. May participate in the regulation of the chloride and bicarbonate homeostasis in spermatozoa.



### **Cellular Location**

Cytoplasm. Apical cell membrane. Endomembrane system; Peripheral membrane protein. Cell projection, filopodium. Cell projection, ruffle. Cell projection, microvillus. Note=Translocates from the cytoplasm to the apical cell membrane in a PODXL-dependent manner. Colocalizes with CFTR at the midpiece of sperm tail (By similarity). Colocalizes with actin in microvilli-rich apical regions of the syncytiotrophoblast. Found in microvilli, ruffling membrane and filopodia of HeLa cells. Present in lipid rafts of T-cells.

## **Tissue Location**

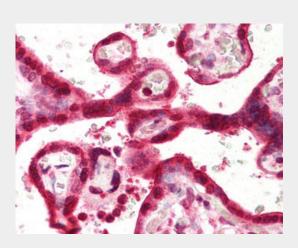
Detected in liver, kidney, pancreas, prostate, spleen, small intestine and placenta, in particular in the syncytiotrophoblast.

## SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) - Images

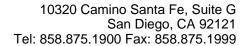


Anti-SLC9A3R1 / NHERF1 antibody IHC of human placenta.

## SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) - Background

Scaffold protein that connects plasma membrane proteins with members of the ezrin/moesin/radixin family and thereby helps to link them to the actin cytoskeleton and to regulate their surface expression. Necessary for recycling of internalized ADRB2. Was first known to play a role in the regulation of the activity and subcellular location of SLC9A3. Necessary for cAMP-mediated phosphorylation and inhibition of SLC9A3. May enhance Wnt signaling. May participate in HTR4 targeting to microvilli (By similarity). Involved in the regulation of phosphate reabsorption in the renal proximal tubules. Involved in sperm capacitation. May participate in the regulation of the chloride and bicarbonate homeostasis in spermatozoa.

# SLC9A3R1 / NHERF1 / EBP50 Antibody (clone EBP-10) - References





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Murthy A.,et al.J. Biol. Chem. 273:1273-1276(1998).

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Zody M.C.,et al.Nature 440:1045-1049(2006).

Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.