

KD-Validated Anti-NHERF1 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1669

### Specification

# KD-Validated Anti-NHERF1 Rabbit Monoclonal Antibody - Product Information

WB, FC Application **Primary Accession** 014745 Reactivity Rat, Human Monoclonal Clonality Isotype Rabbit IgG Calculated MW Predicted, 39 kDa, o bserved, 50 kDa **KD**a Gene Name NHERF1 Aliases **NHERF1; NHERF Family PDZ Scaffold** Protein 1; NHERF-1; NHERF; EBP50; SLC9A3R1; NHE-RF; Solute Carrier Family 9. Subfamily A (NHE3, Cation Proton Antiporter 3), Member 3 Regulator 1; Na(+)/H(+) Exchange Regulatory Cofactor NHE-RF1; Ezrin-Radixin-Moesin-Binding Phosphoprotein 50; Regulatory Cofactor Of Na(+)/H(+) Exchanger; Na(+)/H(+) Exchange Regulatory Cofactor 1; SLC9A3 **Regulator 1; Solute Carrier Family 9** (Sodium/Hvdrogen Exchanger). Isoform 3 **Regulatory Factor 1; Solute Carrier Family** 9 (Sodium/Hydrogen Exchanger), Isoform 3 **Regulator 1: Solute Carrier Family 9** (Sodium/Hydrogen Exchanger), Member 3 **Regulator 1; Solute Carrier Family 9** Isoform A3 Regulatory Factor 1; Ezrin-Radixin-Moesin Binding Phosphoprotein-50; Sodium-Hydrogen Exchanger Regulatory Factor 1; Na+/H+ Exchange Regulatory Co-Factor: NPHLOP2 A synthesized peptide derived from human Immunogen **EBP50** 

# KD-Validated Anti-NHERF1 Rabbit Monoclonal Antibody - Additional Information

Gene ID9368Other NamesNa(+)/H(+) exchange regulatory cofactor NHE-RF1, NHERF-1, Ezrin-radixin-moesin-binding<br/>phosphoprotein 50, EBP50, Regulatory cofactor of Na(+)/H(+) exchanger, Sodium-hydrogen<br/>exchanger regulatory factor 1, Solute carrier family 9 isoform A3 regulatory factor 1, NHERF1 (<a<br/>href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=11075"<br/>target="\_blank">HGNC:11075</a>), NHERF, SLC9A3R1



# KD-Validated Anti-NHERF1 Rabbit Monoclonal Antibody - 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 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.

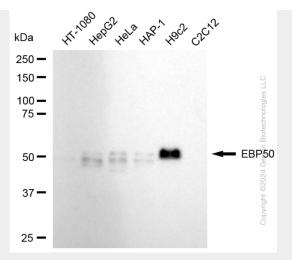
# KD-Validated Anti-NHERF1 Rabbit Monoclonal Antibody - Protocols

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

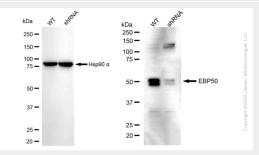
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# KD-Validated Anti-NHERF1 Rabbit Monoclonal Antibody - Images

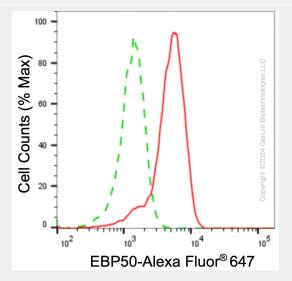




Western blotting analysis using anti-NHERF Family PDZ Scaffold Protein 1 antibody (Cat#AGI1669). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-NHERF Family PDZ Scaffold Protein 1 antibody (Cat#AGI1669, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-EBP50 antibody (Cat#AGI1669). EBP50 expression in wild-type (WT) and NHERF1 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-EBP50 antibody (Cat#AGI1669, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of EBP50 expression in H9c2 cells using anti-EBP50 antibody (Cat #AGI1669, 1:2,000). Green, isotype control; red, EBP50.