

# Product datasheet

info@arigobio.com

# ARG41349 anti-NHERF1 / EBP50 antibody

Package: 100 μl Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes NHERF1 / EBP50

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Bov, Mk

Tested Application FACS, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name NHERF1 / EBP50

Species Human

Immunogen KLH-conjugated synthetic peptide between aa. 168-197 of Human NHERF1 / EBP50.

Conjugation Un-conjugated

Alternate Names EBP50; NHERF; NHERF1; NPHLOP2; 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

## **Application Instructions**

| Application table | Application  | Dilution    |
|-------------------|--|-------------|
|                   | FACS   | 1:10 - 1:50 |
|                   | WB   | 1:1000      |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |             |
| Positive Control  | MDA-MB-435   |             |
| Observed Size     | ~ 52 kDa   |             |

#### **Properties**

Form Liquid

Purification Purification with Protein A and immunogen peptide.

Buffer PBS and 0.09% (W/V) Sodium azide.

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

SLC9A3R1

Gene Full Name

solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 1

Background

This gene encodes a sodium/hydrogen exchanger regulatory cofactor. The protein interacts with and regulates various proteins including the cystic fibrosis transmembrane conductance regulator and G-protein coupled receptors such as the beta2-adrenergic receptor and the parathyroid hormone 1 receptor. The protein also interacts with proteins that function as linkers between integral membrane and cytoskeletal proteins. The protein localizes to actin-rich structures including membrane ruffles, microvilli, and filopodia. Mutations in this gene result in hypophosphatemic nephrolithiasis/osteoporosis type 2, and loss of heterozygosity of this gene is implicated in breast

cancer.[provided by RefSeq, Sep 2009]

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. [UniProt]

Calculated Mw

39 kDa

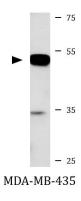
PTM

Phosphorylated on serine residues. [UniProt]

Cellular Localization

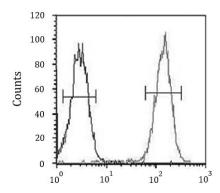
Cytoplasm. Apical cell membrane. Endomembrane system; Peripheral membrane protein. Cell projection, filopodium, ruffle, microvillus. Note=Translocates from the cytoplasm to the apical cell membrane in a PODXL-dependent manner. Colocalizes with CFTR at the midpiece of sperm tail. Colocalizes with actin 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. [UniProt]

## **Images**



#### ARG41349 anti-NHERF1 / EBP50 antibody WB image

Western blot: 35  $\mu g$  of MDA-MB-435 cell lysate stained with ARG41349 anti-NHERF1 / EBP50 antibody.



# ARG41349 anti-NHERF1 / EBP50 antibody FACS image

Flow Cytometry: MDA-MB-435 cells stained with ARG41349 anti-NHERF1 / EBP50 antibody (right histogram) or without primary antibody as control (left histogram), followed by incubation with FITC labelled secondary antibody.