

NHERF1 Polyclonal Antibody

Store at -20°C

Catalog Number: A16581

Pub. No. MAN0009299 **Rev.** 1.00

Clonality: Polyclonal Amount: 100 µL Host/Class: Rabbit

Reactivity: Human NHERF1 Species Reactivity: Human

Product Description

NHERF1 (Na+/H+ exchanger regulatory factor) is one of several related PDZ domain-containing proteins (1). It was first identified as a necessary co-factor for cyclic AMP-associated inhibition of NHE3 (2). NHERF1 is a multifunctional adaptor protein that interacts with receptors and ion transporters via its PDZ domains, and with the ERM family of proteins, including merlin, via its carboxy-terminus (2,3). NHERF1 has been found to promote the formation of a ternary complex containing PTEN, NHERF1, and PDGFR, and may be involved in inhibition of PI3K/Akt signaling by recruiting PTEN to PDGFR (4). Other proposed functions of NHERF1 include testicular differentiation, endosomal recycling, membrane targeting, protein sorting, and trafficking (6).

Product Specifications

Immunogen: A synthetic peptide

surrounding Ala310 of human

NHERF1

Alternate Names: EBP-50
Apparent MW: 50 kDa
Gene ID: 9368
Protein Accession No.: O14745

Lot: See product label

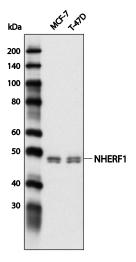


Figure 1 Western blot analysis of extracts from MCF-7 and T-47D cells using NHERF1 Polyclonal Antibody.

Product Applications

Applications reported for this antibody include western blot, and immunofluorescence (immunocytochemistry).

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

| Application | Recommended Dilution |
|--|-------------------------|
| Western blotting | 1:1000 |
| Immunofluorescence (immunocytochemistry) | 1:50 |

Storage and Handling

Store reagents at -20° C. Avoid repeated freezing and thawing. Do not aliquot the antibody.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage Buffer

10~mM sodium HEPES (pH 7.5), 150 nM NaCl, 100 $\mu g/\text{mL}$ BSA, 50% glycerol.

References

- 1. Donowitz, M. et al. (2005) J Physiol 567, 3-11.
- 2. Voltz, J.W. et al. (2001) Oncogene 20, 6309-14.
- 3. Stemmer-Rachamimov, A.O. et al. (2001) Am J Pathol 158, 57-62
- 4. Takahashi, Y. et al. (2006) EMBO J 25, 910-20.
- 5. Weinman, E.J. et al. (2000) Am J Physiol Renal Physiol 279, F393-9.

Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Limited Product Warranty

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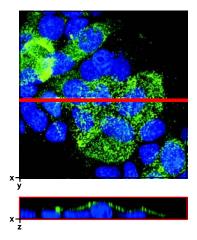


Figure 2 Projected confocal z-stack of MCF-7 cells showing staining at the apical membrane when labeled with NHERF1 Polyclonal Antibody (green). A fluorescent DNA dye was used to produce the blue pseudocolor.

Explanation of symbols

| Symbol | Description | Symbol | Description | Symbol | Description |
|-------------|------------------------------|----------|---|--------|-------------|
| *** | Manufacturer | REF | Catalog number | LOT | Batch code |
| \geq | Use by | X | Temperature limitation | | |
| \bigcap_i | Consult instructions for use | <u> </u> | Caution, consult accompanying documents | | |

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