# ARG63077
# anti-NHERF1 / EBP50 antibody [EBP-10]

Package: 100 µg
Store at: -20°C

## Summary

| | |
|---|---|
| Product Description | Mouse Monoclonal antibody [EBP-10] recognizes NHERF1 / EBP50 |
| Tested Reactivity | Hu |
| Tested Application | IHC-P, IP, WB |
| Specificity | The clone EBP-10 reacts with NHERF1/EBP50 phosphoprotein of 50 kDa, which serves as an adaptor and regulator protein. |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | EBP-10 |
| Isotype | IgG2b |
| Target Name | NHERF1 / EBP50 |
| Species | Human |
| Immunogen | Bacterially produced recombinant full-length human NHERF1. |
| Conjugation | Un-conjugated |
| Alternate Names | EBP50; NHERF; NHERF1; NHERF-1; 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 |
|---|---|
| IHC-P | 5 µg/ml |
| IP | Assay-dependent |
| WB | 2 µg/ml |

Application Note: WB: Antibody incubation: 60 min on vertical incubator. Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. Application note: Non-reducing condition. 10% separating SDS-PAGE gel.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: WB: Raji

## Properties

| | |
|---|---|
| Form | Liquid |

| | |
|---|---|
| Purification | Purified from hybridoma culture supernatant by protein A-affinity chromatography. |
| Purity | > 95% (by SDS-PAGE) |
| Buffer | PBS (pH 7.4) and 15 mM Sodium azide |
| Preservative | 15 mM Sodium azide |
| Concentration | 1 mg/ml |
| 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 before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

| | |
|---|---|
| Database links | GeneID: 9368 Human<br><br>Swiss-port # O14745 Human |
| Gene Symbol | SLC9A3R1 |
| Gene Full Name | solute carrier family 9, subfamily A (NHE3, cation proton antiporter 3), member 3 regulator 1 |
| Background | NHERF1 (Na+/H+ exchanger regulatory factor 1), also known as EBP50 (ezrin, radixin, moesin-binding phosphoprotein 50) is an adaptor protein, which associates with beta-catenin and is required for its localization at the cell-cell junctions, interacts with various G protein-coupled receptors and regulates their traffic, as well as sodium-hydrogen exchange and sodium-dependent phosphate transport. NHERF1/EBP50 inhibits cell motility and is required to suppress anchorage-independent growth. It contains C-terminal ERM (ezrin, radixin, moesin)-binding region and two N-terminal PDZ (postsynaptic-density-95/disc-large/ZO1 homology) domains and is able to form head-to-tail intramolecular conformation to regulate its interactions. |
| 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] |
| Research Area | Cancer antibody; Controls and Markers antibody; Signaling Transduction antibody |
| Calculated Mw | 39 kDa |
| PTM | Phosphorylated on serine residues. |