

RALBP1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP12329c**Specification**

RALBP1 Antibody (Center) Blocking peptide - Product InformationPrimary Accession [Q15311](#)**RALBP1 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 10928**Other Names**

Rala-binding protein 1, RalBP1, 76 kDa Ral-interacting protein, Dinitrophenyl S-glutathione ATPase, DNP-SG ATPase, Ral-interacting protein 1, RALBP1, RLIP1, RLIP76

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RALBP1 Antibody (Center) Blocking peptide - Protein Information**Name** RALBP1 ([HGNC:9841](#))**Function**

Multifunctional protein that functions as a downstream effector of RALA and RALB (PubMed:7673236). As a GTPase-activating protein/GAP can inactivate CDC42 and RAC1 by stimulating their GTPase activity (PubMed:7673236). As part of the Ral signaling pathway, may also regulate ligand-dependent EGF and insulin receptors-mediated endocytosis (PubMed:10910768, PubMed:12775724). During mitosis, may act as a scaffold protein in the phosphorylation of EPSIN/EPN1 by the mitotic kinase cyclin B-CDK1, preventing endocytosis during that phase of the cell cycle (PubMed:12775724). During mitosis, also controls mitochondrial fission as an effector of RALA (PubMed:21822277). Recruited to mitochondrion by RALA, acts as a scaffold to foster the mitotic kinase cyclin B-CDK1-mediated phosphorylation and activation of DNM1L (PubMed:21822277).

Cellular Location

Cell membrane; Peripheral membrane protein. Cytoplasm, cytosol Cytoplasm, cytoskeleton, spindle pole {ECO:0000250|UniProtKB:Q62796} Nucleus. Mitochondrion. Note=Cytosolic protein that transiently associates with the mitotic spindle poles in early prophase, and dissociates from them after completion of mitosis (By similarity) Targeted to the plasma membrane through its interaction with RALB, directed by FGF signaling. Docking on the membrane is required to transduce the Ral signal (By similarity). Recruited by RALA to the mitochondrion during mitosis where it regulates mitochondrial fission (PubMed:21822277). Nuclear localization is cell cycle dependent while membrane localization is seen in adherent cells (PubMed:22319010). The region involved in membrane association could form transmembrane domains and expose a part of the protein extracellularly (Probable) {ECO:0000250|UniProtKB:Q62796, ECO:0000250|UniProtKB:Q9PT60, ECO:0000269|PubMed:21822277, ECO:0000269|PubMed:22319010, ECO:0000305|PubMed:15610018}

Tissue Location

Expressed ubiquitously but at low levels. Shows a strong expression in the erythrocytes.

RALBP1 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

RALBP1 Antibody (Center) Blocking peptide - Images**RALBP1 Antibody (Center) Blocking peptide - Background**

RALBP1 plays a role in receptor-mediated endocytosis and is a downstream effector of the small GTP-binding protein RAL (see RALA; MIM 179550). Small G proteins, such as RAL, have GDP-bound inactive and GTP-bound active forms, which shift from the inactive to the active state through the action of RALGDS (MIM 601619), which in turn is activated by RAS (see HRAS; MIM 190020) (summary by Feig, 2003 [PubMed 12888294]).

RALBP1 Antibody (Center) Blocking peptide - References

Singhal, S.S., et al. Int. J. Cancer 126(6):1327-1338(2010) Singhal, S.S., et al. Cancer Lett. 283(2):152-158(2009) Awasthi, Y.C., et al. J Toxicol Environ Health B Crit Rev 12(7):540-551(2009) Singhal, S.S., et al. Cancer Res. 69(10):4244-4251(2009) Singhal, S.S., et al. Biochem. Pharmacol. 77(6):1074-1083(2009)