

RALBP1 Rabbit mAb

Catalog # AP77500

Product Information

Application WB, IHC-P, FC Primary Accession Q15311

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human RALBP1

Purification Affinity Chromatography

Calculated MW 76063

Additional Information

Gene ID 10928

Other Names RALBP1

Dilution WB~~1/500-1/1000 IHC-P~~N/A FC~~1:10~50

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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:<u>12775724</u>). During mitosis, also controls mitochondrial fission as an effector of RALA (PubMed:<u>21822277</u>). 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).

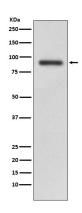
Cellular Location Cell membrane; Peripheral membrane protein. Cytoplasm, cytosol Cytoplasm,

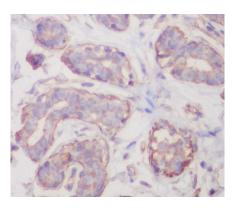
cytoskeleton, spindle pole {ECO:0000250 | UniProtKB:Q62796} Nucleus. Mitochondrion. Note=Cytosolic protein that transiently associates with the mitotic spindle poles in early prophase, and dissociates from them after completion of mitosis (By similarity) Targeted to the plasma membrane through its interaction 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.

Images





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