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RALBP1 Antibody

Rabbit mAb
Catalog # AP90679

Product Information

Application	WB, IHC, FC
Primary Accession	Q15311
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	RALBP1; RIP1; RLIP1; RLIP76;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	76063

Additional Information

Dilution	WB 1:5000~1:10000 IHC 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RALBP1
Description	RalBP1 interacts with RalA and the endocytosis protein REPS2 (POB1) through its carboxy-terminal Ral binding domain. RalBP1 has an intrinsic GTPase activating function and interacts with Cdc42 through its centrally located Rho-GAP domain. A protein complex containing RalBP1/POB1/RalA regulates endocytosis of membrane receptors. RalBP1 also functions as a non-ABC transporter that catalyzes the ATP-dependent transport of numerous xenobiotics, including glutathione conjugates and some chemotherapeutic agents.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

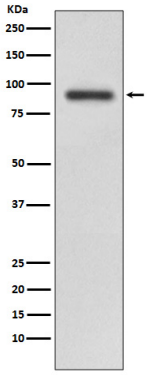
Cellular Location

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.

Images



Western blot analysis of RALBP1 expression in HeLa cell lysate.

Image not found : 202311/AP90679-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human breast, using RALBP1 Antibody.

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