

RIP1 / RALBP1 Antibody (clone OTI1H9)
Mouse Monoclonal Antibody
Catalog # ALS17206**Specification**

RIP1 / RALBP1 Antibody (clone OTI1H9) - Product Information

Application	IHC-P, WB, FC
Primary Accession	Q15311
Other Accession	10928
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	76063

RIP1 / RALBP1 Antibody (clone OTI1H9) - Additional Information**Gene ID** 10928**Other Names**

RALBP1, 76 kDa Ral-interacting protein, DNP-SG ATPase, Ral-interacting protein 1, RalA-binding protein 1, RIP1, Rlip76 protein, RIP, RLIP1, RalA binding protein 1, RLIP76

Target/Specificity

Human RALBP1

Reconstitution & Storage

PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide. Store at -20°C. Minimize freezing and thawing.

Precautions

RIP1 / RALBP1 Antibody (clone OTI1H9) is for research use only and not for use in diagnostic or therapeutic procedures.

RIP1 / RALBP1 Antibody (clone OTI1H9) - 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.

Volume

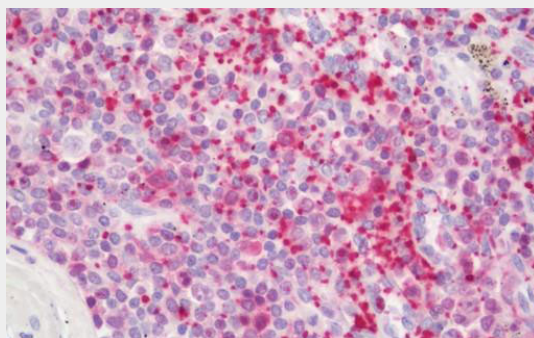
50 µl

RIP1 / RALBP1 Antibody (clone OTI1H9) - Protocols

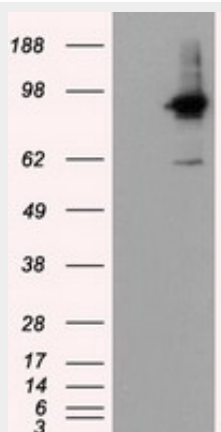
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

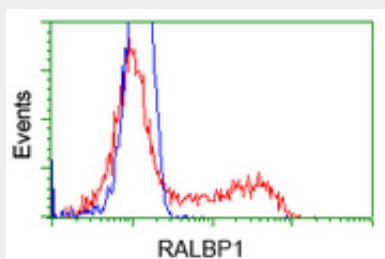
RIP1 / RALBP1 Antibody (clone OTI1H9) - Images



Human Spleen: Formalin-Fixed, Paraffin-Embedded (FFPE)



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY RALBP1...



HEK293T cells transfected with either pCMV6-ENTRY RALBP1 (Red) or empty vector control plasmid...

RIP1 / RALBP1 Antibody (clone OTI1H9) - Background

Can activate specifically hydrolysis of GTP bound to RAC1 and CDC42, but not RALA. Mediates ATP-dependent transport of S-(2,4-dinitrophenyl)-glutathione (DNP-SG) and doxorubicin (DOX) and is the major ATP-dependent transporter of glutathione conjugates of electrophiles (GS-E) and DOX in erythrocytes. Can catalyze transport of glutathione conjugates and xenobiotics, and may contribute to the multidrug resistance phenomenon. Serves as a scaffold protein that brings together proteins forming an endocytotic complex during interphase and also with CDK1 to switch off endocytosis. One of its substrates would be EPN1/Epsin.

RIP1 / RALBP1 Antibody (clone OTI1H9) - References

- Jullien-Flores V., et al. J. Biol. Chem. 270:22473-22477(1995).
- Awasthi S., et al. Biochemistry 39:9327-9334(2000).
- Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DBJ databases.
- Ikeda M., et al. J. Biol. Chem. 273:814-821(1998).
- Rosse C., et al. J. Biol. Chem. 278:30597-30604(2003).