10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-RalA Binding Protein 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1632

Product Information

Application	WB, FC, ICC
Primary Accession	Q15311
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB875
Calculated MW	76063
Gene Name	RALBP1
Aliases	RalA Binding Protein 1; RLIP76; RIP1; Dinitrophenyl S-Glutathione ATPase; 76 KDa Ral-Interacting Protein; Ral-Interacting Protein 1; RalA-Binding Protein 1; DNP-SG ATPase; RLIP1; RIP; EC 7.6.2.2; EC 7.6.2.3; RalBP1; RLIP
Immunogen	A synthesized peptide derived from human RALBP1

Additional Information

Gene ID	10928
Other Names	RalA-binding protein 1, 76 kDa Ral-interacting protein, Dinitrophenyl S-glutathione ATPase, DNP-SG ATPase, 7.6.2.2, 7.6.2.3, Ral-interacting protein 1, RALBP1 (HGNC:9841)

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.