

RaIA Antibody

Rabbit mAb

Catalog # AP93108

Product Information

Application	WB, IHC
Primary Accession	P11233
Reactivity	Human
Clonality	Monoclonal
Other Names	Ral a; RAL; RALA;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	23567

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RaIA
Description	Multifunctional GTPase involved in a variety of cellular processes including gene expression, cell migration, cell proliferation, oncogenic transformation and membrane trafficking. Accomplishes its multiple functions by interacting with distinct downstream effectors.
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

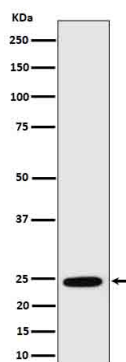
Name	RALA
Synonyms	RAL
Function	Multifunctional GTPase involved in a variety of cellular processes including gene expression, cell migration, cell proliferation, oncogenic transformation and membrane trafficking. Accomplishes its multiple functions by interacting with distinct downstream effectors (PubMed: 18756269 , PubMed: 19306925 , PubMed: 20005108 , PubMed: 21822277 , PubMed: 30500825). Acts as a GTP sensor for GTP-dependent exocytosis of dense core vesicles. The RALA-exocyst complex regulates integrin-dependent membrane raft exocytosis and growth signaling (PubMed: 20005108). Key regulator of LPAR1 signaling and competes with GRK2 for binding to LPAR1 thus affecting the signaling properties of the receptor. Required for anchorage- independent proliferation of transformed cells (PubMed: 19306925). During mitosis, supports the stabilization and elongation of the intracellular bridge between dividing cells. Cooperates with EXOC2 to recruit other components of the exocyst to the

early midbody (PubMed:[18756269](#)). During mitosis, also controls mitochondrial fission by recruiting to the mitochondrion RALBP1, which mediates the phosphorylation and activation of DNML1 by the mitotic kinase cyclin B- CDK1 (PubMed:[21822277](#)).

Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Cleavage furrow. Midbody, Midbody ring. Mitochondrion. Note=Predominantly at the cell surface in the absence of LPA. In the presence of LPA, colocalizes with LPAR1 and LPAR2 in endocytic vesicles (PubMed:19306925). May colocalize with CNTRL/centriolin at the midbody ring (PubMed:16213214). However, localization at the midbody at late cytokinesis was not confirmed (PubMed:18756269). Relocalizes to the mitochondrion during mitosis where it regulates mitochondrial fission (PubMed:21822277)

Images



Western blot analysis of RalA in MCF7 cell lysate.

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