

Anti-RalA Rabbit Monoclonal Antibody

Catalog # ABO16633

Specification

Anti-RalA Rabbit Monoclonal Antibody - Product Information

Application WB, IHC
Primary Accession P11233
Host Rabbit
Isotype Reactivity Human
Clonality Monoclonal
Format Liquid

Description

Anti-RalA Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

Anti-RalA Rabbit Monoclonal Antibody - Additional Information

Gene ID 5898

Other Names

Ras-related protein Ral-A, 3.6.5.2, RALA, RAL

Application Details

WB 1:500-1:2000
IHC 1:50-1:200

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human RalA

Purification

Affinity-chromatography

Storage Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for

up to one month. Avoid repeated

freeze-thaw cycles.

Anti-RalA Rabbit Monoclonal Antibody - 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 DNM1L 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)

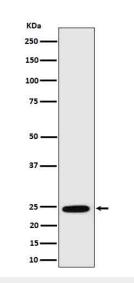
Anti-RalA Rabbit Monoclonal Antibody - Protocols

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

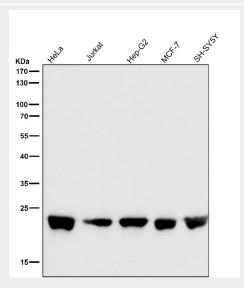
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-RalA Rabbit Monoclonal Antibody - Images





Western blot analysis of RalA in MCF7 cell lysate.



All lanes use the Antibody at $1.5 \, \mathrm{K}$ dilution for 1 hour at room temperature.