

## RalA Antibody

Rabbit mAb Catalog # AP93108

## Specification

# **RalA Antibody - Product Information**

Application Primary Accession Clonality <b>Other Names</b> Ral a; RAL; RALA;	WB, IHC <u>P11233</u> Monoclonal
lsotype Host Calculated MW	Rabbit IgG Rabbit 23567 Da
RalA Antibody - Additional Information	
Dilution	WB~~1:1000 IHC~~1:100~500
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human RalA
Description	Multifuntional 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.

## **RalA Antibody - Protein Information**

## Name RALA

Synonyms RAL

### Function



href="http://www.uniprot.org/citations/21822277" target="\_blank">21822277</a>, PubMed:<a href="http://www.uniprot.org/citations/30500825" target="\_blank">30500825</a>). 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:<a href="http://www.uniprot.org/citations/20005108" target="\_blank">20005108</a>). 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:<a href="http://www.uniprot.org/citations/19306925" target="\_blank">19306925</a>). 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:<a href="http://www.uniprot.org/citations/18756269" target="\_blank">18756269</a>). 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:<a href="http://www.uniprot.org/citations/21822277" target="\_blank">21822277</a>).

#### **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)

### RalA Antibody - Protocols

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

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

**RalA Antibody - Images** 





Western blot analysis of RalA in MCF7 cell lysate.