

**RALA Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2091a****Specification****RALA Antibody - Product Information**

Application	WB, FC, E
Primary Accession	<a href="#">P11233</a>
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	23.6kDa KDa

**Description**

The product of this gene belongs to the small GTPase superfamily, Ras family of proteins. GTP-binding proteins mediate the transmembrane signaling initiated by the occupancy of certain cell surface receptors. This gene encodes a low molecular mass ras-like GTP-binding protein that shares about 50% similarity with other ras proteins.

**Immunogen**

Purified recombinant fragment of human RALA (AA: 71-203) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**RALA Antibody - Additional Information**

**Gene ID** 5898

**Other Names**

Ras-related protein Ral-A, RALA, RAL

**Dilution**

WB~~1/500 - 1/2000

FC~~1/200 - 1/400

E~~1/10000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

RALA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**RALA 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:<a href="http://www.uniprot.org/citations/18756269" target="\_blank">18756269</a>, PubMed:<a href="http://www.uniprot.org/citations/19306925" target="\_blank">19306925</a>, PubMed:<a href="http://www.uniprot.org/citations/20005108" target="\_blank">20005108</a>, PubMed:<a 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 DNML1 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.

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