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

RALA Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18995b

Specification

RALA Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P11233
Other Accession	P63322, P63321, NP_005393.2
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**23567**
Antigen Region	**158-186**

RALA Antibody (C-term) - Additional Information

Gene ID 5898

Other Names
Ras-related protein Ral-A, RALA, RAL

Target/Specificity
This RALA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 158-186 amino acids from the C-terminal region of human RALA.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Precautions
RALA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RALA Antibody (C-term) - 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).

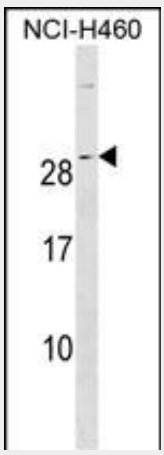
Cellular Location
Cell membrane; Lipid-anchor; Cytoplasmic side. Cleavage furrow. Midbody, Midbody ring. Mitochondrion. Note=Predominantly at the cell surface in the absence of LPA. In the presence of LPA, colocalizes with LPAR1 and LPAR2 in endocytic vesicles (PubMed:19306925). May colocalize with CNTRL/centriolin 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)

RALA Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RALA Antibody (C-term) - Images



RALA Antibody (C-term) (Cat. #AP18995b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the RALA antibody detected the RALA protein (arrow).

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

RALA Antibody (C-term) - Background

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.

RALA Antibody (C-term) - References

Nichols, C.D., et al. Curr. Biol. 20(14):1316-1320(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Godin, C.M., et al. Mol. Pharmacol. 77(3):388-395(2010)
Lim, K.H., et al. Mol. Cell. Biol. 30(2):508-523(2010)
Wang, K., et al. Int J Immunopathol Pharmacol 22(3):735-743(2009)