

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
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit Ig
23567
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

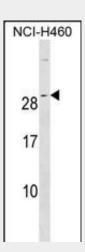
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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



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).

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



therapeutic procedures.

22(3):735-743(2009)

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. 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: <a h ref="http://www.uniprot.org/citations/18756 269" target=" blank">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.

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 mitochodrion 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
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture