

RALA Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP18995b**Specification****RALA Antibody (C-term) Blocking Peptide -
Product Information**Primary Accession [P11233](#)**RALA Antibody (C-term) Blocking Peptide -
Additional Information**

Gene ID 5898

Other Names

Ras-related protein Ral-A, RALA, RAL

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**RALA Antibody (C-term) Blocking Peptide -
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

**RALA Antibody (C-term) Blocking Peptide -
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) Blocking Peptide -
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)

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 DNMT1 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 mitochondrion during mitosis where it regulates mitochondrial fission (PubMed:21822277)

RALA Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)