

**RALA Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP18995b****Specification**

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**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 (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 (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

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

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

The product of this gene belongs to the small GTPasesuperfamily, Ras family of proteins. GTP-binding proteins mediatethe transmembrane signaling initiated by the occupancy of certaincell surface receptors. This gene encodes a low molecular massras-like GTP-binding protein that shares about 50% similarity withother 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)