

Rala Antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI13975

Product Information

Application	WB
Primary Accession	P63322
Other Accession	NM_031093 , NP_112355
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Goat, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23553

Additional Information

Gene ID	81757
Other Names	Ras-related protein Ral-A, Rala, Ral, Ral-a
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Rala antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Rala Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Rala
Synonyms	Ral, Ral-a
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. 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 (By similarity). The RALA-exocyst complex regulates integrin-dependent membrane raft exocytosis and growth signaling (By similarity). 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 (By similarity). 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 (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P11233}; Lipid-anchor {ECO:0000250|UniProtKB:P11233}; Cytoplasmic side {ECO:0000250|UniProtKB:P11233}. Cleavage furrow {ECO:0000250|UniProtKB:P11233}. Midbody, Midbody ring {ECO:0000250|UniProtKB:P11233}. Mitochondrion {ECO:0000250|UniProtKB:P11233}. Note=Predominantly at the cell surface in the absence of LPA. In the presence of LPA, colocalizes with LPAR1 and LPAR2 in endocytic vesicles. May colocalize with CNTRL/centriolin at the midbody ring. However, localization at the midbody at late cytokinesis was not confirmed. Relocalizes to the mitochondrion during mitosis where it regulates mitochondrial fission {ECO:0000250|UniProtKB:P11233}

Tissue Location

Higher levels where found in testes followed by brain, adrenal gland, pituitary gland, ovary, liver and kidney. Low expression was found in muscle.

References

Willey G.M.,et al.Biochem. Biophys. Res. Commun. 194:552-559(1993).
Cantor S.B.,et al.Mol. Cell. Biol. 15:4578-4584(1995).

Images



Host: Rabbit
Target Name: Rala
Sample Tissue: Rat Stomach lysates
Antibody Dilution: 1.0µg/ml

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.