

Anti-RALB Picoband Antibody
Catalog # ABO12481**Specification****Anti-RALB Picoband Antibody - Product Information**

Application	WB
Primary Accession	P11234
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Ras-related protein Ral-B(RALB) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-RALB Picoband Antibody - Additional Information

Gene ID 5899

Other Names

Ras-related protein Ral-B, RALB

Calculated MW

23409 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cell membrane ; Lipid-anchor ; Cytoplasmic side . During late cytokinesis localizes at the midbody.

Protein Name

Ras-related protein Ral-B

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human RALB (166-203aa DKVFFDLMREIRTKKMSSENKDKNGKKSSKNKKSFKERC), different from the related mouse sequence by three amino acids, and from the related rat sequence by four amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-RALB Picoband Antibody - Protein Information

Name RALB

Function

Multifunctional GTPase involved in a variety of cellular processes including gene expression, cell migration, cell proliferation, oncogenic transformation and membrane trafficking (PubMed:10393179, PubMed:17875936, PubMed:18756269).

Accomplishes its multiple functions by interacting with distinct downstream effectors. Acts as a GTP sensor for GTP-dependent exocytosis of dense core vesicles (By similarity). Required both to stabilize the assembly of the exocyst complex and to localize functional exocyst complexes to the leading edge of migrating cells (By similarity). Required for suppression of apoptosis (PubMed:17875936). In late stages of cytokinesis, upon completion of the bridge formation between dividing cells, mediates exocyst recruitment to the midbody to drive abscission (PubMed:18756269). Involved in ligand-dependent receptor mediated endocytosis of the EGF and insulin receptors (PubMed:10393179).

Cellular Location

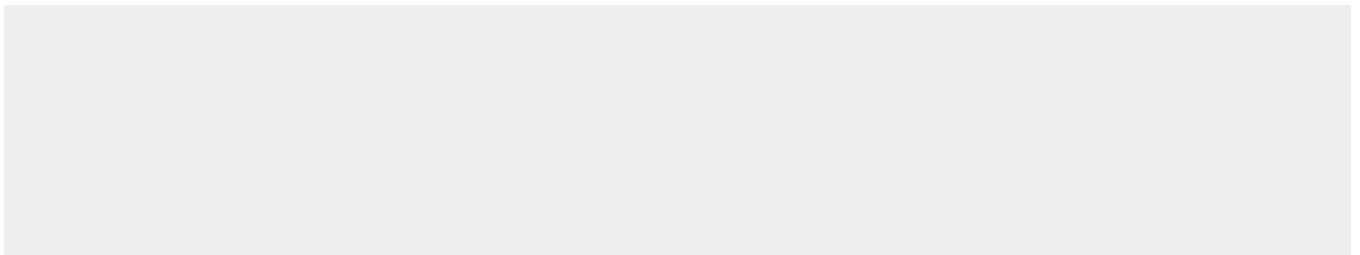
Cell membrane; Lipid-anchor; Cytoplasmic side. Midbody Note=During late cytokinesis, enriched at the midbody

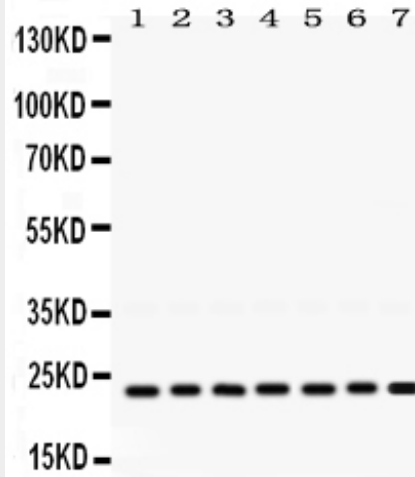
Anti-RALB Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-RALB Picoband Antibody - Images





Anti- RALB Picoband antibody, ABO12481, Western blotting All lanes: Anti RALB (ABO12481) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Rat Thymus Tissue Lysate at 50ug
Lane 3: Rat Lung Tissue Lysate at 50ug
Lane 4: Mouse Spleen Tissue Lysate at 50ug
Lane 5: Mouse Liver Tissue Lysate at 50ug
Lane 6: HELA Whole Cell Lysate at 40ug
Lane 7: 22RV1 Whole Cell Lysate at 40ug
Predicted bind size: 23KD
Observed bind size: 23KD

Anti-RALB Picoband Antibody - Background

Ras-related protein Ral-B (RalB) is a protein that in humans is encoded by the RALB gene on chromosome 2. This protein is one of two isoforms of the Ral protein, the other being RalA, and part of the Ras GTPase family. As a Ras GTPase, RalB functions as a molecular switch that becomes active when bound to GTP and inactive when bound to GDP. RalB can be activated by RalGEFs and, in turn, activate effectors in signal transduction pathways leading to biological outcomes. Additionally, Ral proteins have been associated with the progression of several cancers, including bladder cancer and prostate cancer. While the above functions appear to be shared between the two Ral isoforms, their differential subcellular localizations result in their differing involvement in certain biological processes. In particular, RalB is more involved in apoptosis and cell motility. Moreover, RalB specifically interacts with Exo84 to assemble the beclin-1/VPS34 autophagy initiation complex, and with Sec5 to activate the innate immune response via the Tank-binding kinase 1 (TBK1).