

Rabbit Anti-RALA antibody

SL5953R

| Product Name: | RALA |
|------------------------|--|
| Chinese Name: | Ras样蛋白A抗体 |
| Alias: | Ral a; Ral A protein; RAL; RALA; RALA_HUMAN; RAS like protein A; Ras related protein RalA; Ras-related protein Ral-A. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 24kDa |
| Cellular localization: | cytoplasmicThe cell membraneExtracellular matrix |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human RalA:121-206/206 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | Multifuntional 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. Plays a role in the early stages of cytokinesis and is required to tether the exocyst to the cytokinetic furrow. The RALA-exocyst complex regulates integrin-dependent |

membrane raft exocytosis and growth signaling. Key regulator of LPAR1 signaling and competes with ADRBK1 for binding to LPAR1 thus affecting the signaling properties of the receptor. Required for anchorage-independent proliferation of transformed cells.

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. Plays a role in the early stages of cytokinesis and is required to tether the exocyst to the cytokinetic furrow. The RALA-exocyst complex regulates integrin-dependent membrane raft exocytosis and growth signaling. Key regulator of LPAR1 signaling and competes with ADRBK1 for binding to LPAR1 thus affecting the signaling properties of the receptor. Required for anchorage-independent proliferation of transformed cells.

Subunit:

Interacts with RALBP1 via its effector domain. Interacts with EXOC8 and EXOC2. EXOC2 and EXOC8 have overlapping binding sites and compete for RALA binding. Interacts with Clostridium exoenzyme C3. Interacts with RALGPS1. Interacts with LPAR1 and LPAR2. Interacts with ADRBK1 in response to LPAR1 activation. RALA and ADRBK1 mutually inhibit each other's binding to LPAR1.

Subcellular Location:

Cell surface. Cell membrane; Lipid-anchor; Cytoplasmic side. Cleavage furrow. Midbody.

Post-translational modifications:

Prenylation is essential for membrane localization. The geranylgeranylated form and the farnesylated mutant does not undergo alternative prenylation in response to geranylgeranyltransferase I inhibitors (GGTIs) and farnesyltransferase I inhibitors (FTIs).

Similarity: Belongs to the small GTPase superfamily. Ras family.

SWISS:

P11233

Gene ID: 5898

Database links:

Entrez Gene: 5898Human

Entrez Gene: 56044Mouse

| Entrez Gene: 81757Rat |
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| <u>Omim: 179550</u> Human |
| <u>SwissProt: P11233</u> Human |
| SwissProt: P63321Mouse |
| <u>SwissProt: P63322</u> Rat |
| Unigene: 6906Human |
| Unigene: 27348 Mouse |
| Unigene: 100380Rat |
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| Important Note: |
| Important Note. |
| This product as supplied is intended for research use only, not for use in human, |
| therapeutic or diagnostic applications. |
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Lignostic applications.