

Anti-RAP1A Picoband Antibody
Catalog # ABO12502**Specification**

Anti-RAP1A Picoband Antibody - Product Information

Application	WB
Primary Accession	P62834
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Ras-related protein Rap-1A(RAP1A) detection. Tested with WB in Human;Rat.

Reconstitution

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

Anti-RAP1A Picoband Antibody - Additional Information

Gene ID 5906

Other Names

Ras-related protein Rap-1A, C21KG, G-22K, GTP-binding protein smg p21A, Ras-related protein Krev-1, RAP1A, KREV1

Calculated MW

20987 MW KDa

Application Details

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

Subcellular Localization

Cell membrane ; Lipid-anchor . Cytoplasm . Cytoplasm, perinuclear region . Cell junction . Early endosome . Recruited from early endosome to late endosome compartment after nerve growth factor (NGF) stimulation. Localized with RAPGEF2 at cell-cell junctions (By similarity). Colocalized with RAPGEF2 in the perinuclear region. .

Protein Name

Ras-related protein Rap-1A

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 RAP1A (156-181aa EIFYDLVRQINRKTTPVEKKPKKKSC), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, 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-RAP1A Picoband Antibody - Protein Information

Name RAP1A

Synonyms KREV1

Function

Counteracts the mitogenic function of Ras, at least partly because it can interact with Ras GAPs and RAF in a competitive manner. Together with ITGB1BP1, regulates KRIT1 localization to microtubules and membranes (PubMed: [17916086](http://www.uniprot.org/citations/17916086)). Plays a role in nerve growth factor (NGF)-induced neurite outgrowth. Plays a role in the regulation of embryonic blood vessel formation. Involved in the establishment of basal endothelial barrier function. Facilitates the progressive accumulation of CDH1 at mature desmosome junctions via cAMP-dependent signaling and its interaction with PKP3 (PubMed: [25208567](http://www.uniprot.org/citations/25208567)). May be involved in the regulation of the vascular endothelial growth factor receptor KDR expression at endothelial cell-cell junctions.

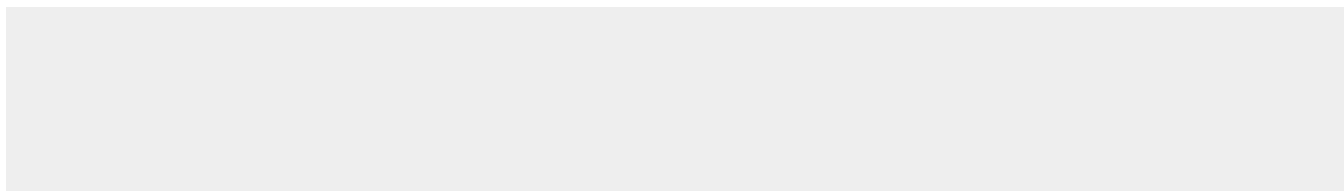
Cellular Location

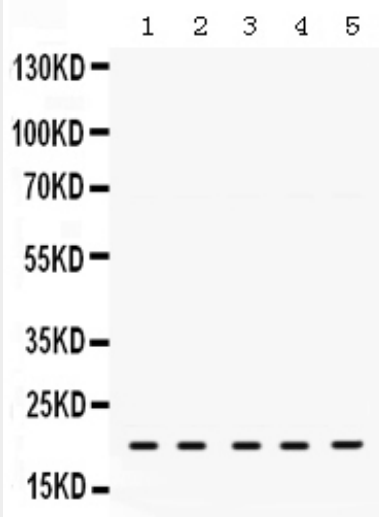
Cell membrane; Lipid-anchor. Cytoplasm. Cytoplasm, perinuclear region. Cell junction. Early endosome. Note=Recruited from early endosome to late endosome compartment after nerve growth factor (NGF) stimulation Localized with RAPGEF2 at cell-cell junctions (By similarity) Colocalized with RAPGEF2 in the perinuclear region.

Anti-RAP1A 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-RAP1A Picoband Antibody - Images



Anti- RAP1A Picoband antibody, ABO12502, Western blottingAll lanes: Anti RAP1A (ABO12502) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Liver Tissue Lysate at 50ugLane 3: Rat Kidney Tissue Lysate at 50ugLane 4: MCF-7 Whole Cell Lysate at 40ugLane 5: SW620 Whole Cell Lysate at 40ugPredicted bind size: 21KDObserved bind size: 21KD

Anti-RAP1A Picoband Antibody - Background

Ras-related protein Rap-1A is a protein that in humans is encoded by the RAP1A gene. This gene encodes a member of the Ras family of small GTPases. The encoded protein undergoes a change in conformational state and activity, depending on whether it is bound to GTP or GDP. And it is activated by several types of guanine nucleotide exchange factors (GEFs), and inactivated by two groups of GTPase-activating proteins (GAPs). The activation status of the encoded protein is therefore affected by the balance of intracellular levels of GEFs and GAPs. Additionally, the encoded protein regulates signaling pathways that affect cell proliferation and adhesion, and may play a role in tumor malignancy. Pseudogenes of this gene have been defined on chromosomes 14 and 17. Alternative splicing results in multiple transcript variants.