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# RAP1A Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP12949B**

## Specification

### RAP1A Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | P62834 |
| Other Accession | A6NIZ1, Q7ZXH7, Q62636, Q99JI6, Q4R9D4, P61224, Q6TEN1, Q5ZHX1, P61223, P62836, P62835, P62833, NP_001010935.1, NP_002875.1 |
| Reactivity | **Mouse** |
| Predicted | **Bovine, Rat, Chicken, Zebrafish, Human, Monkey, Xenopus** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **20987** |
| Antigen Region | **142-170** |

### RAP1A Antibody (C-term) - 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

**Target/Specificity**
This RAP1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 142-170 amino acids from the C-terminal region of human RAP1A.

**Dilution**
WB~~1:1000

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
RAP1A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### RAP1A Antibody (C-term) - Protein Information

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**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). 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). May be involved in the regulation of the vascular endothelial growth factor receptor KDR expression at endothelial cell-cell junctions.

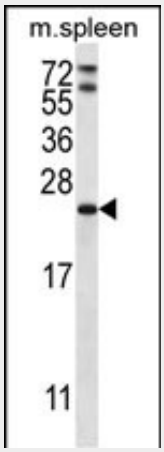
**Cellular Location**
Cell membrane; Lipid-anchor. Cytoplasm. Cytoplasm, perinuclear region. Cell junction. Early endosome. Note=Recruited from early endosome to late endosome compartment after nerve growth factor (NGF) stimulation Localized with RAPGEF2 at cell-cell junctions (By similarity) Colocalized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

## RAP1A Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## RAP1A Antibody (C-term) - Images




RAP1A Antibody (C-term) (Cat. #AP12949b) western blot analysis in mouse spleen tissue lysates (35ug/lane).This demonstrates the RAP1A antibody detected the RAP1A protein (arrow).

## RAP1A Antibody (C-term) - Background

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The product of this gene belongs to the family of RAS-related proteins. These proteins share approximately 50% amino acid identity with the classical RAS proteins and have numerous structural features in common. The most striking difference between RAP proteins and RAS proteins resides in their 61st amino acid: glutamine in RAS is replaced by threonine in RAP proteins. The product of this gene counteracts the mitogenic function of RAS because it can interact with RAS GAPs and RAF in a competitive manner. Two transcript variants encoding the same protein have been identified for this gene.

**RAP1A Antibody (C-term) - References**

Liu, C., et al. Mol. Cell. Biol. 30(16):3956-3969(2010)
Kelly, P., et al. J. Biol. Chem. 285(21):15777-15785(2010)
Ahmed, S.M., et al. J. Biol. Chem. 285(9):6538-6551(2010)
Hsu, Y.H., et al. PLoS Genet. 6 (6), E1000977 (2010) :
Sarthy, J., et al. EMBO J. 28(21):3390-3399(2009)