

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 <u>A6NIZ1</u>, <u>Q7ZXH7</u>, <u>Q62636</u>, <u>Q99JI6</u>, <u>Q4R9D4</u>,

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



Name RAP1A

Synonyms KREV1

Function Induces morphological reversion of a cell line transformed by a Ras oncogene. 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. 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. May be involved in the regulation of the vascular endothelial growth factor receptor KDR expression at endothelial cell-cell junctions.

Cellular Location

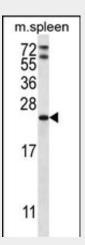
Cell membrane; Lipid-anchor. Cytoplasm. Cytoplasm, perinuclear region. Cell junction. Early endosome. Note=Recruited from early endosome to late endosome compartment after nerve growth factor (NGF) stimulation Localized with RAPGEF2 at cell-cell junctions (By similarity) Colocalized with RAPGEF2 in the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

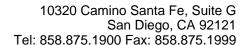
RAP1A Antibody (C-term) - Images



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

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)