

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) Peptide-affinity purified goat antibody Catalog # AF2381a

Specification

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB, IF, IP, ICC, E <u>O6ZSZ5</u> <u>NP_056133.2</u>, <u>NP_001124427.1</u>, <u>23370</u> Human, Dog, Medaka Goat Polyclonal 0.5 mg/ml IgG 151642

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) - Additional Information

Gene ID 23370

Other Names

Rho guanine nucleotide exchange factor 18, 114 kDa Rho-specific guanine nucleotide exchange factor, p114-Rho-GEF, p114RhoGEF, Septin-associated RhoGEF, SA-RhoGEF, ARHGEF18, KIAA0521

Dilution WB~~1:1000 IF~~1:50~200 IP~~N/A ICC~~N/A E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) - Protein Information

Name ARHGEF18

Synonyms KIAA0521



Function

Acts as a guanine nucleotide exchange factor (GEF) for RhoA GTPases. Its activation induces formation of actin stress fibers. Also acts as a GEF for RAC1, inducing production of reactive oxygen species (ROS). Does not act as a GEF for CDC42. The G protein beta-gamma (Gbetagamma) subunits of heterotrimeric G proteins act as activators, explaining the integrated effects of LPA and other G-protein coupled receptor agonists on actin stress fiber formation, cell shape change and ROS production. Required for EPB41L4B-mediated regulation of the circumferential actomyosin belt in epithelial cells (PubMed:22006950).

Cellular Location

Cytoplasm. Cytoplasm, cytoskeleton. Cell membrane. Apical cell membrane. Note=In unactivated eosinophils, distributed around the cell periphery in the perimembranous region (PubMed:29601110). In activated eosinophils, relocates to the tip of the nucleopod, a membrane structure formed during activation when the nucleus moves to one end of the cell, and is also concentrated in membrane protrusions at the opposite end of the cell (PubMed:29601110) Localizes to the apical cell membrane in epithelial cells (PubMed:22006950).

Tissue Location

Expressed in all tissues tested with highest expression in kidney and pancreas. Weakly or not expressed in liver, skeletal muscle and testis. Isoform 1: Expressed in eosinophils (PubMed:29601110). Isoform 2: Expressed in eosinophils (PubMed:29601110). Isoform 3: Expressed in eosinophils (PubMed:29601110). Isoform 4: Not detected in eosinophils (PubMed:29601110).

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) - Protocols

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

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) - Images

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) - Background

This antibody is expected to recognize both reported isoforms (NP_056133.2; NP_001124427.1).

P114-RHO-GEF / ARHGEF18 Antibody (C-Term) - References

Identification and characterization of a novel Rho-specific guanine nucleotide exchange factor. Blomquist A, Schworer G, Schablowski H, Psoma A, Lehnen M, Jakobs KH, Rumenapp U. Biochem J. 2000 Dec 1;352 Pt 2:319-25. PMID: 11085924