

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	WB, IF, IP, ICC, E
Primary Accession	Q6ZSZ5
Other Accession	NP_056133.2 , NP_001124427.1 , 23370
Reactivity	Human, Dog, Medaka
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	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](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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