

**ARHGEF18 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP17912A****Specification**

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**ARHGEF18 Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O6ZSZ5</a>
Other Accession	<a href="#">NP_056133.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	151642
Antigen Region	91-119

**ARHGEF18 Antibody (N-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

**Target/Specificity**

This ARHGEF18 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 91-119 amino acids from the N-terminal region of human ARHGEF18.

**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**

ARHGEF18 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ARHGEF18 Antibody (N-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

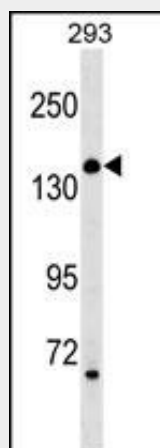
Expressed in all tissues tested with highest expression in kidney and pancreas. Weakly or not expressed in liver, skeletal muscle and testis. Isoform 1: Expressed in eosinophils (PubMed:29601110). Isoform 2: Expressed in eosinophils (PubMed:29601110). Isoform 3: Expressed in eosinophils (PubMed:29601110).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

### ARHGEF18 Antibody (N-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](#)

### ARHGEF18 Antibody (N-term) - Images



ARHGEF18 Antibody (N-term) (Cat. #AP17912a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the ARHGEF18 antibody detected the ARHGEF18 protein (arrow).

**ARHGEF18 Antibody (N-term) - Background**

Rho GTPases are GTP binding proteins that regulate a wide spectrum of cellular functions. These cellular processes include cytoskeletal rearrangements, gene transcription, cell growth and motility. Activation of Rho GTPases is under the direct control of guanine nucleotide exchange factors (GEFs). The protein encoded by this gene is a guanine nucleotide exchange factor and belongs to the Rho GTPase GEF family. Family members share a common feature, a Dbl (DH) homology domain followed by a pleckstrin (PH) homology domain. Alternatively spliced transcript variants encoding different isoforms have been identified.

**ARHGEF18 Antibody (N-term) - References**

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Niu, J., et al. Circ. Res. 93(9):848-856(2003)  
Rabizadeh, S., et al. Cytokine Growth Factor Rev. 14 (3-4), 225-239 (2003) :  
Salehi, A.H., et al. J. Biol. Chem. 277(50):48043-48050(2002)  
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