

### **ARHGEF1** Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50069

### Specification

# ARHGEF1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Antigen Region WB <u>O92888</u> Human, Mouse, Rat Rabbit Polyclonal 102,99,104 KDa 168-198

### **ARHGEF1** Antibody - Additional Information

Gene ID 9138

**Other Names** Rho guanine nucleotide exchange factor 1, 115 kDa guanine nucleotide exchange factor, p115-RhoGEF, p115RhoGEF, Sub15, ARHGEF1

**Dilution** WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°C

### **ARHGEF1 Antibody - Protein Information**

Name ARHGEF1

Function

Seems to play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12 (GNA12) and alpha-13 (GNA13) subunits (PubMed:<a

href="http://www.uniprot.org/citations/9641915" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/9641916" target="\_blank">9641916</a>). Acts as a GTPase-activating protein (GAP) for GNA12 and GNA13, and as guanine nucleotide exchange factor (GEF) for RhoA GTPase (PubMed:<a href="http://www.uniprot.org/citations/30521495" target="\_blank">30521495</a>, PubMed:<a href="http://www.uniprot.org/citations/8810315" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/8810315" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/8810315" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/8810315" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/8641915" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/9641915" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/8641915" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/9641915" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/9641915" target="\_blank">9641915</a>, PubMed:<a href="http://www.uniprot.org/citations/9641916" target="\_blank">9641916</a>). Activated G alpha 13/GNA13 stimulates the RhoGEF activity through interaction with the RGS-like domain (PubMed:<a



href="http://www.uniprot.org/citations/9641916" target="\_blank">9641916</a>). This GEF activity is inhibited by binding to activated GNA12 (PubMed:<a href="http://www.uniprot.org/citations/9641916" target=" blank">9641916</a>). Mediates

angiotensin-2-induced RhoA activation (PubMed:<a

href="http://www.uniprot.org/citations/20098430" target="\_blank">20098430</a>). In lymphoid follicles, may trigger activation of GNA13 as part of S1PR2-dependent signaling pathway that leads to inhibition of germinal center (GC) B cell growth and migration outside the GC niche.

**Cellular Location** Cytoplasm. Membrane. Note=Translocated to the membrane by activated GNA13 or LPA stimulation

**Tissue Location** Ubiquitously expressed.

# ARHGEF1 Antibody - Protocols

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

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

#### **ARHGEF1 Antibody - Images**



Western blot analysis of lysate from Hela cell line, using ARHGEF1 Antibody(C18385). C18385 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

### ARHGEF1 Antibody - Background

Seems to play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12



(GNA12) and alpha-13 (GNA13) subunits. Acts as GTPase-activating protein (GAP) for GNA12 and GNA13, and as guanine nucleotide exchange factor (GEF) for RhoA GTPase. Activated G alpha 13/GNA13 stimulates the RhoGEF activity through interaction with the RGS-like domain. This GEF activity is inhibited by binding to activated GNA12. Mediates angiotensin-2- induced RhoA activation.

## **ARHGEF1 Antibody - References**

Hart M.J.,et al.J. Biol. Chem. 271:25452-25458(1996). Aasheim H.-C.,et al.Oncogene 14:1747-1752(1997). Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Kozasa T.,et al.Science 280:2109-2111(1998). Hart M.J.,et al.Science 280:2112-2114(1998).