

### ARHGEF1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14869A

### Specification

## ARHGEF1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q92888</u> <u>NP\_945328.1</u>, <u>NP\_945353.1</u>, <u>NP\_004697.2</u> Human Rabbit Polyclonal Rabbit IgG 102435 164-192

## ARHGEF1 Antibody (N-term) - Additional Information

Gene ID 9138

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

#### Target/Specificity

This ARHGEF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 164-192 amino acids from the N-terminal region of human ARHGEF1.

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** 

ARHGEF1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **ARHGEF1** Antibody (N-term) - 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:<u>9641915</u>, PubMed:<u>9641916</u>). Acts as a GTPase-activating protein (GAP) for GNA12 and GNA13, and as guanine nucleotide exchange factor (GEF) for RhoA GTPase (PubMed:<u>9641915</u>, PubMed:<u>9641916</u>, PubMed:<u>8810315</u>, PubMed:<u>30521495</u>). Activated G alpha 13/GNA13 stimulates the RhoGEF activity through interaction with the RGS-like domain (PubMed:<u>9641916</u>). This GEF activity is inhibited by binding to activated GNA12 (PubMed:<u>9641916</u>). Mediates angiotensin-2-induced RhoA activation (PubMed:<u>20098430</u>).

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

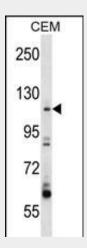
**Tissue Location** Ubiquitously expressed.

## ARHGEF1 Antibody (N-term) - 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 (N-term) - Images



ARHGEF1 Antibody (N-term) (Cat. #AP14869a) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the ARHGEF1 antibody detected the ARHGEF1 protein (arrow).

### ARHGEF1 Antibody (N-term) - Background

Rho GTPases play a fundamental role in numerous cellular processes that are initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form complex with G proteins and stimulate Rho-dependent signals. Multiple alternatively spliced transcript variants have been found



for this gene, but the full-length nature of some variants has not been defined.

# **ARHGEF1 Antibody (N-term) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Loirand, G., et al. Med Sci (Paris) 26 (6-7), 561-563 (2010) : Takefuji, M., et al. J. Hum. Genet. 55(1):42-49(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Slattum, G., et al. J. Cell Biol. 186(5):693-702(2009)