

ARHGEF1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14869A**Specification**

ARHGEF1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O92888
Other Accession	NP_945328.1 , NP_945353.1 , NP_004697.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	102435
Antigen Region	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

E~~Use at an assay dependent concentration.

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

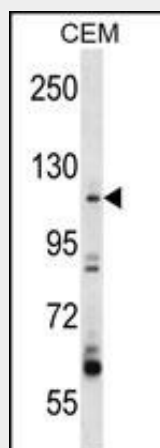
Ubiquitously expressed.

ARHGEF1 Antibody (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](#)

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)