

ARHGEF1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50069

Product Information

Application WB Primary Accession Q92888

Reactivity Human, Mouse, Rat

HostRabbitClonalitypolyclonalCalculated MW102435

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

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: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.

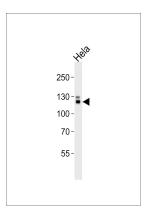
Background

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.

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).

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 35 ug.

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