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ARHGEF1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50069

Product Information

Application	WB
Primary Accession	Q92888
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	102435

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℃

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.

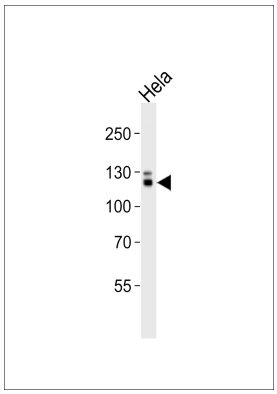
Background

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 35ug.

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