Datasheet for ABIN968063

anti-IQGAP1 antibody (AA 1348-1490)

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Overview

Quantity:	50 µg
Target:	IQGAP1
Binding Specificity:	AA 1348-1490
Reactivity:	Human, Mouse, Rat, Dog
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This IQGAP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	Human IQGAP1 aa. 1348-1490
Clone:	24-IQGAP1
Isotype:	IgG1
Cross-Reactivity:	Mouse (Murine), Rat (Rattus), Dog (Canine)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Source of all serum proteins is from USDA inspected abattoirs located in the United States. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Please refer to us for technical protocols.

Product Details

Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	IQGAP1
Alternative Name:	IQGAP1 (IQGAP1 Products)
Background:	GTPases (Ras, Rho, cdc42Hs, and rac) modulate various cellular functions such as cytoskeletal architecture, growth, motility, and gene expression. The activity of the GTP-binding proteins is regulated by factors that accelerate GTP-binding (GAPs) and proteins that enhance the rate of GTP hydrolysis (GTPases). IQGAP1 is Ras-GAP related protein that contains a WW domain that binds poly-proline regions, a calponin-homology domain (CHD), an IQ domain of unconventional myosins, and a C-terminal GAP-related domain (GRD). IQGAP1 co-immunoprecipitates with cdc42 and calmodulin, and colocalizes with cdc42Hs at the leading edges of the plasma membrane and at the cell-cell junctions. IQGAP1 may interact with both cadherins and catenins leading to dissociation of these proteins from sites of cell adhesion. Thus, IQGAP1 may be a Rac1 and Cdc42 effector that negatively regulates cadherin-mediated cell junctions.
Molecular Weight:	195 kDa
Pathways:	Signaling Events mediated by VEGFR1 and VEGFR2

Application Details

Comment:	Related Products: ABIN968536, ABIN967389
Restrictions:	For Research Use only

Handling

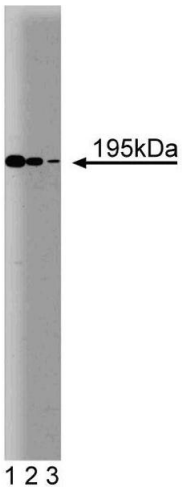
Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20°C.

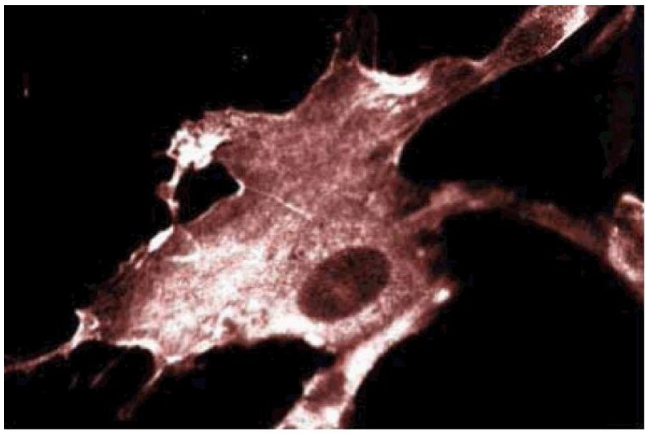
Publications

Product cited in:	Mbele, Deloulme, Gentil, Delphin, Ferro, Garin, Takahashi, Baudier: "The zinc- and calcium-binding S100B interacts and co-localizes with IQGAP1 during dynamic rearrangement of cell membranes." in: **The Journal of biological chemistry**, Vol. 277, Issue 51, pp. 49998-50007, (2002) (PubMed). Ruiz-Velasco, Lanning, Williams: "The activation of Rac1 by M3 muscarinic acetylcholine receptors involves the translocation of Rac1 and IQGAP1 to cell junctions and changes in the composition of protein complexes containing Rac1, IQGAP1, and actin." in: **The Journal of biological chemistry**, Vol. 277, Issue 36, pp. 33081-91, (2002) (PubMed). Li, Wang, Chakladar, Bronson, Bernards: "Gastric hyperplasia in mice lacking the putative Cdc42 effector IQGAP1." in: **Molecular and cellular biology**, Vol. 20, Issue 2, pp. 697-701, (2000) (PubMed). Hart, Callow, Souza, Polakis: "IQGAP1, a calmodulin-binding protein with a rasGAP-related domain, is a potential effector for cdc42Hs." in: **The EMBO journal**, Vol. 15, Issue 12, pp. 2997-3005, (1996) (PubMed). Kuroda, Fukata, Kobayashi, Nakafuku, Nomura, Iwamatsu, Kaibuchi: "Identification of IQGAP as a putative target for the small GTPases, Cdc42 and Rac1." in: **The Journal of biological chemistry**, Vol. 271, Issue 38, pp. 23363-7, (1996) (PubMed).



Western Blotting

Image 1. Western blot analysis of IQGAP1 on a human endothelial cell lysate. Lane 1: 1:5000, lane 2: 1:10,000, lane 3: 1:20,000 dilution of the mouse anti-IQGAP1 antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of WI-38 cells (Human lung fibroblasts, ATCC CCL-75).

