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# Anti-ARHGEF1 Antibody

Catalog # AP59769

## Product Information

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| **Application** | WB, IHC |
| **Primary Accession** | Q92888 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 102435 |

## Additional Information

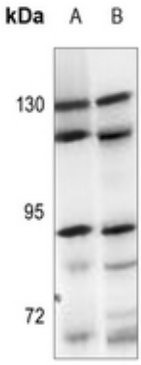
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| **Gene ID** | 9138 |
| **Other Names** | Rho guanine nucleotide exchange factor 1; 115 kDa guanine nucleotide exchange factor; p115-RhoGEF; p115RhoGEF; Sub1.5 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ARHGEF1. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IHC~~1:100~500 |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

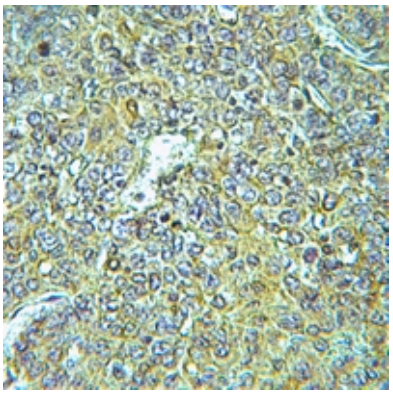
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| **Name** | ARHGEF1 |
| **Function** | Seems to play a role in the regulation of RhoA GTPase by guanine nucleotide-binding alpha-12 (GNA12) and alpha-13 (GNA13) subunits (PubMed:9641915, PubMed:9641916). Acts as a GTPase-activating protein (GAP) for 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 |

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| **Tissue Location** | Ubiquitously expressed. |

## Images




Western blot analysis of ARHGEF1 expression in HuT78 (A), A549 (B) whole cell lysates. (Predicted band size: 102 kD; Observed band size: 125; 90 kD)



Immunohistochemical analysis of ARHGEF1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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