

RhoH Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51475

Product Information

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| Application | WB, IHC-P |
| Primary Accession | Q15669 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 21331 |

Additional Information

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| Gene ID | 399 |
| Other Names | Rho-related GTP-binding protein RhoH, GTP-binding protein TTF, Translocation three four protein, RHOH, ARHH, TTF |
| Dilution | WB~~1:1000 IHC-P~~N/A |
| Format | 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50% |
| Storage | Store at -20 °C. Stable for 12 months from date of receipt |

Protein Information

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| Name | RHOH |
| Synonyms | ARHH, TTF |
| Function | Negative regulator of hematopoietic progenitor cell proliferation, survival and migration. Critical regulator of thymocyte development and T-cell antigen receptor (TCR) signaling by mediating recruitment and activation of ZAP70. Required for phosphorylation of CD3Z, membrane translocation of ZAP70 and subsequent activation of the ZAP70-mediated pathways. Essential for efficient beta-selection and positive selection by promoting the ZAP70-dependent phosphorylation of the LAT signalosome during pre-TCR and TCR signaling. Crucial for thymocyte maturation during DN3 to DN4 transition and during positive selection. Plays critical roles in mast cell function by facilitating phosphorylation of SYK in Fc epsilon RI-mediated signal transduction. Essential for the phosphorylation of LAT, LCP2, PLCG1 and PLCG2 and for Ca(2+) mobilization in mast cells (By similarity). Binds GTP but lacks intrinsic GTPase activity and is resistant to Rho-specific GTPase- activating proteins. Inhibits the activation of NF-kappa-B by TNF and IKKB and the activation of CRK/p38 by TNF. Inhibits activities of RAC1, RHOA and CDC42. Negatively regulates leukotriene production in neutrophils. |

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| Cellular Location | Cytoplasm. Cell membrane; Lipid-anchor; Cytoplasmic side. Note=Colocalizes together with ZAP70 in the immunological synapse. |
| Tissue Location | Expressed only in hematopoietic cells. Present at very high levels in the thymus, less abundant in the spleen, and least abundant in the bone marrow. Expressed at a higher level in the TH1 subtype of T-helper cells than in the TH2 subpopulation. Expressed in neutrophils under inflammatory conditions, such as cystic fibrosis, ulcerative colitis and appendicitis. |

Background

Negative regulator of hematopoietic progenitor cell proliferation, survival and migration. Critical regulator of thymocyte development and T-cell antigen receptor (TCR) signaling by mediating recruitment and activation of ZAP70. Required for phosphorylation of CD3Z, membrane translocation of ZAP70 and subsequent activation of the ZAP70-mediated pathways. Essential for efficient beta-selection and positive selection by promoting the ZAP70-dependent phosphorylation of the LAT signalosome during pre-TCR and TCR signaling. Crucial for thymocyte maturation during DN3 to DN4 transition and during positive selection. Plays critical roles in mast cell function by facilitating phosphorylation of SYK in Fc epsilon RI-mediated signal transduction. Essential for the phosphorylation of LAT, LCP2, PLCG1 and PLCG2 and for Ca(2+) mobilization in mast cells (By similarity). Binds GTP but lacks intrinsic GTPase activity and is resistant to Rho-specific GTPase-activating proteins. Inhibits the activation of NF-kappa-B by TNF and IKKB and the activation of CRK/p38 by TNF. Inhibits activities of RAC1, RHOA and CDC42. Negatively regulates leukotriene production in neutrophils.

References

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 Li X.,et al.Mol. Cell. Biol. 22:1158-1171(2002).
 Wu X.,et al.Biochem. Biophys. Res. Commun. 351:328-335(2006).
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