

## TTF / RHOH Antibody (aa141-190)

Rabbit Polyclonal Antibody Catalog # ALS14240

### **Specification**

## TTF / RHOH Antibody (aa141-190) - Product Information

Application IF, WB, IHC Primary Accession Q15669

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 21kDa KDa

### TTF / RHOH Antibody (aa141-190) - Additional Information

Gene ID 399

#### **Other Names**

Rho-related GTP-binding protein RhoH, GTP-binding protein TTF, Translocation three four protein, RHOH, ARHH, TTF

### Target/Specificity

RhoH Antibody detects endogenous levels of total RhoH protein.

### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

#### **Precautions**

TTF / RHOH Antibody (aa141-190) is for research use only and not for use in diagnostic or therapeutic procedures.

## TTF / RHOH Antibody (aa141-190) - Protein Information

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.

#### **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.

### **Volume**

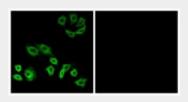
50 µl

## TTF / RHOH Antibody (aa141-190) - Protocols

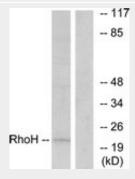
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## TTF / RHOH Antibody (aa141-190) - Images

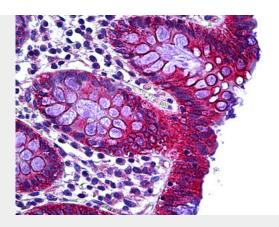


Immunofluorescence of A549 cells, using RhoH Antibody.

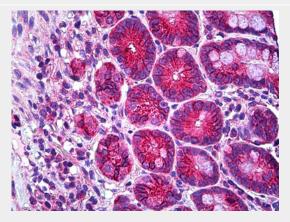


Western blot of extracts from HT-29 cells, using RhoH Antibody.





Anti-RHOH antibody IHC of human colon.



Anti-RHOH antibody IHC of human small intestine.

## TTF / RHOH Antibody (aa141-190) - 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.

# TTF / RHOH Antibody (aa141-190) - References

Dallery E., et al. Oncogene 10:2171-2178(1995). Puhl H.L. III, et al. Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. Li X., et al. Mol. Cell. Biol. 22:1158-1171(2002). Wu X., et al. Biochem. Biophys. Res. Commun. 351:328-335(2006). Daryadel A., et al. J. Immunol. 182:6527-6532(2009).