Anti-Rho H antibody

Description	Rabbit polyclonal to Rho H.

Model	STJ95448
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Rho H
Immunogen Region	110-190 aa, C-terminal
Gene ID	399
Gene Symbol	RHOH
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
Specificity	Rho H Polyclonal Antibody detects endogenous levels of Rho H protein.
Tissue Specificity	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.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Rho-related GTP-binding protein RhoH GTP-binding protein TTF Translocation three four protein

Molecular Weight	21 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:686OMIM:602037
Alternative Names	Rho-related GTP-binding protein RhoH GTP-binding protein TTF Translocation three four protein
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 . 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.
Sequence and Domain Family	The region involved in interaction with ZAP70 is a non-canonical immunoreceptor tyrosine-based activation motif (ITAM).
Cellular Localization	Cytoplasm Cell membrane. Colocalizes together with ZAP70 in the immunological synapse.
Post-translational Modifications	Phosphorylated on tyrosine by LCK. Phosphorylated by FYN. Phosphorylation enhances the interactions with ZAP70 and SYK and is critical for its function in thymocyte development .