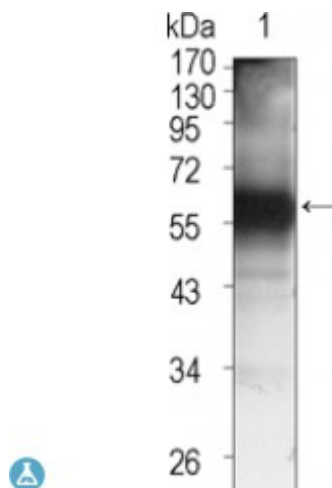


Anti-Tec antibody



Description	Mouse monoclonal to Tec.
Model	STJ98416
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Purified recombinant fragment of Tec expressed in E. Coli.
Gene ID	7006
Gene Symbol	TEC
Dilution range	WB 1:500-1:2000ELISA 1:10000
Specificity	Tec Monoclonal Antibody detects endogenous levels of Tec protein.
Tissue Specificity	Expressed in a wide range of cells, including hematopoietic cell lines like myeloid, B-, and T-cell lineages.
Purification	Affinity purification
Clone ID	3A5
Note	For Research Use Only (RUO).
Protein Name	Tyrosine-protein kinase Tec
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1

Formulation	Ascitic fluid containing 0.03% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:11719OMIM:600583
Alternative Names	Tyrosine-protein kinase Tec
Function	Non-receptor tyrosine kinase that contributes to signaling from many receptors and participates as a signal transducer in multiple downstream pathways, including regulation of the actin cytoskeleton. Plays a redundant role to ITK in regulation of the adaptive immune response. Regulates the development, function and differentiation of conventional T-cells and nonconventional NKT-cells. Required for TCR-dependent IL2 gene induction. Phosphorylates DOK1, one CD28-specific substrate, and contributes to CD28-signaling. Mediates signals that negatively regulate IL2RA expression induced by TCR cross-linking. Plays a redundant role to BTK in BCR-signaling for B-cell development and activation, especially by phosphorylating STAP1, a BCR-signaling protein. Required in mast cells for efficient cytokine production. Involved in both growth and differentiation mechanisms of myeloid cells through activation by the granulocyte colony-stimulating factor CSF3, a critical cytokine to promoting the growth, differentiation, and functional activation of myeloid cells. Participates in platelet signaling downstream of integrin activation. Cooperates with JAK2 through reciprocal phosphorylation to mediate cytokine-driven activation of FOS transcription. GRB10, a negative modifier of the FOS activation pathway, is another substrate of TEC. TEC is involved in G protein-coupled receptor- and integrin-mediated signalings in blood platelets. Plays a role in hepatocyte proliferation and liver regeneration and is involved in HGF-induced ERK signaling pathway. TEC regulates also FGF2 unconventional secretion (endoplasmic reticulum (ER)/Golgi-independent mechanism) under various physiological conditions through phosphorylation of FGF2 'Tyr-215'. May also be involved in the regulation of osteoclast differentiation.
Sequence and Domain Family	The PH domain mediates the binding to inositol polyphosphate and phosphoinositides, leading to its targeting to the plasma membrane. It is extended in the BTK kinase family by a region designated the TH (Tec homology) domain, which consists of about 80 residues preceding the SH3 domain.; The SH3 domain is essential for its targeting to activated CD28 costimulatory molecule.
Cellular Localization	Cytoplasm. Cell membrane. Peripheral membrane protein. Cytoplasm, cytoskeleton. Following B-cell or T-cell receptors activation by antigen, translocates to the plasma membrane through its PH domain. Thrombin and integrin engagement induces translocation of TEC to the cytoskeleton during platelet activation. In cardiac myocytes, assumes a diffuse intracellular localization under basal conditions but is recruited to striated structures upon various stimuli, including ATP .
Post-translational Modifications	Following B-cell or T-cell receptors engagement, translocates to the plasma membrane where it gets phosphorylated at Tyr-519. Undergoes also tyrosine phosphorylation during platelet activation.