

Tec Monoclonal Antibody

Catalog No :	YM0614
Reactivity :	Human
Applications :	WB;ELISA
Target :	Tec
Fields :	>>Osteoclast differentiation;>>T cell receptor signaling pathway
Gene Name :	TEC
Protein Name :	Tyrosine-protein kinase Tec
Human Gene Id :	7006
Human Swiss Prot No :	P42680
Mouse Swiss Prot No :	P24604
Immunogen :	Purified recombinant fragment of Tec expressed in E. Coli.
Specificity :	Tec Monoclonal Antibody detects endogenous levels of Tec protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	74kD
Cell Pathway :	T_Cell_Receptor;

P References :

1. Blood. 2000 Nov 15;96(10):3406-13.
2. J Biol Chem. 1999 Jan 8;274(2):607-17.
3. Blood. 1998 Feb 1;91(3):940-8.

Background :

The protein encoded by this gene belongs to the Tec family of non-receptor protein-tyrosine kinases containing a pleckstrin homology domain. Tec family kinases are involved in the intracellular signaling mechanisms of cytokine receptors, lymphocyte surface antigens, heterotrimeric G-protein coupled receptors, and integrin molecules. They are also key players in the regulation of the immune functions. Tec kinase is an integral component of T cell signaling and has a distinct role in T cell activation. This gene may be associated with myelodysplastic syndrome. [provided by RefSeq, Jul 2008],

Function :

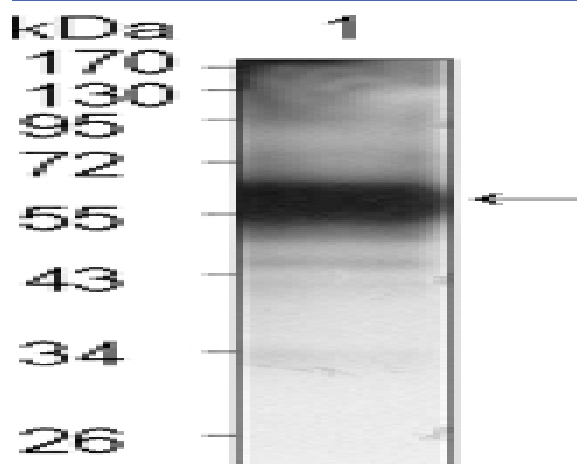
catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,caution:It is uncertain whether Met-1 is the initiator.,cofactor:Binds 1 zinc ion per subunit.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. TEC subfamily.,similarity:Contains 1 Btk-type zinc finger.,similarity:Contains 1 PH domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 SH2 domain.,similarity:Contains 1 SH3 domain.,subunit:Interacts with INPP5D/SHIP1 and INPPL1/SHIP2.,tissue specificity:Hematopoietic cell lines including myeloid, B-, and T-cell lineages.,

Subcellular Location :

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 (By similarity). .

Expression :

Expressed in a wide range of cells, including hematopoietic cell lines like myeloid, B-, and T-cell lineages.

Products Images

Western Blot analysis using Tec Monoclonal Antibody against TEC (aa90-240)-hlgGFc transfected HEK293 cell lysate (1).