

Mouse Tec Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14777c

Product Information

Application	WB, E
Primary Accession	P24604
Other Accession	NP_001106931.1 , NP_001106935.1
Reactivity	Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35154
Calculated MW	73426
Antigen Region	177-205

Additional Information

Gene ID	21682
Other Names	Tyrosine-protein kinase Tec, Tec
Target/Specificity	This Mouse Tec antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 177-205 amino acids from the Central region of mouse Tec.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Tec Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	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 also regulates FGF2 unconventional secretion (endoplasmic reticulum (ER)/Golgi-independent mechanism) under various physiological conditions through phosphorylation of FGF2 'Tyr-82'. May also be involved in the regulation of osteoclast differentiation.

Cellular Location

Cytoplasm. Cell membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton. Note=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).

Tissue Location

Preferentially expressed in liver. Expression is also seen in the hematopoietic cells such as bone marrow, thymus and spleen. Lower expression is seen in the heart, kidney and ovary

Background

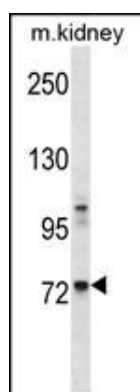
Tec may be an important signal transducer for cell division and/or for differentiation in the liver system.

References

- Boucheron, N., et al. J. Immunol. 185(9):5111-5119(2010)
 Freudenberg, J., et al. Hum. Mol. Genet. 19(19):3863-3872(2010)
 Zhang, M.J., et al. Am. J. Physiol. Heart Circ. Physiol. 299 (3), H713-H722 (2010) :
 Ebert, A.D., et al. Traffic 11(6):813-826(2010)
 Sahu, N., et al. PLoS ONE 5 (6), E11348 (2010) :

Images

Mouse Tec Antibody (Center) (Cat. #AP14777c) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the Tec antibody detected the Tec protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.