

### **Mouse Tec Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14777c

# **Specification**

### Mouse Tec Antibody (Center) - Product Information

Application WB,E
Primary Accession P24604

Other Accession NP 001106931.1, NP 001106935.1

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Rabbit
Polyclonal
Rabbit IgG
73426
177-205

### Mouse Tec Antibody (Center) - 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

### **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.

## Mouse Tec Antibody (Center) - 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 regulates also 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

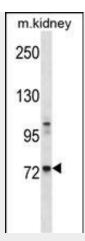
### Mouse Tec Antibody (Center) - Protocols

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

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

# Mouse Tec Antibody (Center) - 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).

# Mouse Tec Antibody (Center) - Background

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

# **Mouse Tec Antibody (Center) - 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):