




## Product datasheet

### Anti-Tec antibody - C-terminal ab191013

3 Images

#### Overview

<b>Product name</b>	Anti-Tec antibody - C-terminal
<b>Description</b>	Rabbit polyclonal to Tec - C-terminal
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Rat, Human <b>Predicted to work with:</b> Mouse 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Tec aa 600 to the C-terminus (C terminal). Database link: <a href="#">P42680</a>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	Rat liver, rat spleen, rat kidney, HeLa and Jurkat lysates; Human intestinal cancer and rat liver tissues.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservatives: 0.025% Thimerosal (merthiolate), 0.025% Sodium azide Constituents: 2.5% BSA, 0.45% Sodium chloride, 0.1% Sodium phosphate
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab191013 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.1 - 0.5 µg/ml. Predicted molecular weight: 73 kDa.
IHC-P		Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

### 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.

### Tissue specificity

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

### Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. TEC subfamily.  
Contains 1 Btk-type zinc finger.  
Contains 1 PH domain.  
Contains 1 protein kinase domain.  
Contains 1 SH2 domain.  
Contains 1 SH3 domain.

### Domain

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.

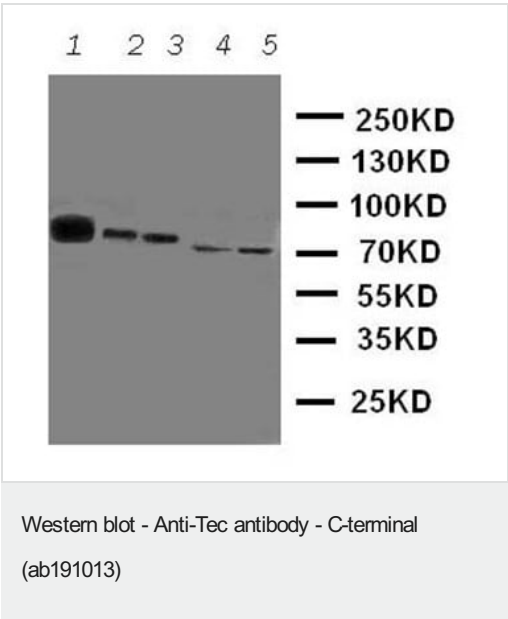
The SH3 domain is essential for its targeting to activated CD28 costimulatory molecule.

### Post-translational

Following B-cell or T-cell receptors engagement, translocates to the plasma membrane where it

<b>modifications</b>	gets phosphorylated at Tyr-519. Undergoes also tyrosine phosphorylation during platelet activation.
<b>Cellular localization</b>	Cytoplasm. Cell membrane. 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).

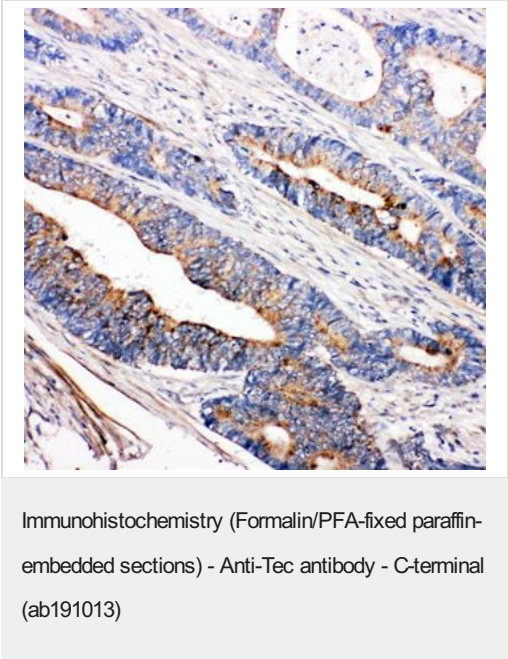
Images



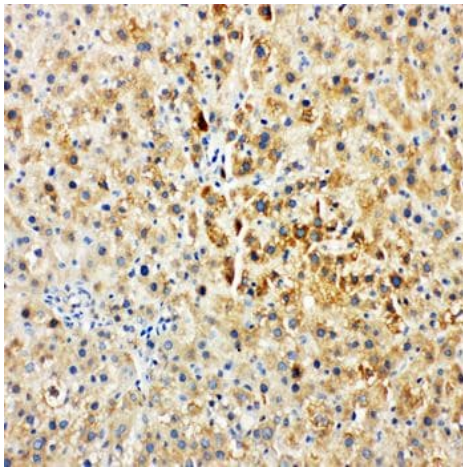
**All lanes :** Anti-Tec antibody - C-terminal (ab191013) at 0.5 µg/ml

- Lane 1 :** Rat liver tissue lysate
- Lane 2 :** Rat spleen tissue lysate
- Lane 3 :** Rat kidney tissue lysate
- Lane 4 :** HeLa cell lysate
- Lane 5 :** Jurkat cell lysate

**Predicted band size:** 73 kDa



Immunohistochemical analysis of paraffin-embedded Human intestinal cancer tissue labeling Tec with ab191013 at 1 µg/ml.



Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling Tec with ab191013 at 1 µg/ml.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tec antibody - C-terminal (ab191013)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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