

ITK Antibody (aa596-607)
Goat Polyclonal Antibody
Catalog # ALS13855**Specification**

ITK Antibody (aa596-607) - Product Information

Application	IHC-P
Primary Accession	Q08881
Reactivity	Human, Monkey
Host	Goat
Clonality	Polyclonal
Calculated MW	72kDa KDa
Dilution	IHC-P~~N/A

ITK Antibody (aa596-607) - Additional Information**Gene ID** 3702**Other Names**

Tyrosine-protein kinase ITK/TSK, 2.7.10.2, Interleukin-2-inducible T-cell kinase, IL-2-inducible T-cell kinase, Kinase EMT, T-cell-specific kinase, Tyrosine-protein kinase Lyk, ITK, EMT, LYK

Target/Specificity

Human ITK.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

ITK Antibody (aa596-607) is for research use only and not for use in diagnostic or therapeutic procedures.

ITK Antibody (aa596-607) - Protein Information**Name** ITK**Synonyms** EMT, LYK**Function**

Tyrosine kinase that plays an essential role in regulation of the adaptive immune response. Regulates the development, function and differentiation of conventional T-cells and nonconventional NKT-cells. When antigen presenting cells (APC) activate T-cell receptor (TCR), a series of phosphorylation lead to the recruitment of ITK to the cell membrane, in the vicinity of the stimulated TCR receptor, where it is phosphorylated by LCK. Phosphorylation leads to ITK autophosphorylation and full activation. Once activated, phosphorylates PLCG1, leading to the activation of this lipase and subsequent cleavage of its substrates. In turn, the endoplasmic reticulum releases calcium in the cytoplasm and the nuclear activator of activated T-cells (NFAT) translocates into the nucleus to perform its transcriptional duty. Phosphorylates 2 essential

adapter proteins: the linker for activation of T-cells/LAT protein and LCP2. Then, a large number of signaling molecules such as VAV1 are recruited and ultimately lead to lymphokine production, T-cell proliferation and differentiation (PubMed:12186560, PubMed:12682224, PubMed:21725281). Required for TCR-mediated calcium response in gamma-delta T-cells, may also be involved in the modulation of the transcriptomic signature in the Vgamma2-positive subset of immature gamma-delta T-cells (By similarity). Phosphorylates TBX21 at 'Tyr-530' and mediates its interaction with GATA3 (By similarity).

Cellular Location

Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q03526}. Note=Localizes in the vicinity of cell surface receptors in the plasma membrane after receptor stimulation

Tissue Location

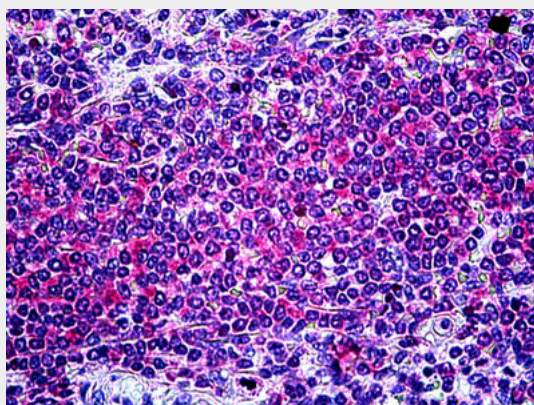
T-cell lines and natural killer cell lines.

ITK Antibody (aa596-607) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ITK Antibody (aa596-607) - Images



Anti-ITK antibody IHC of human spleen.

ITK Antibody (aa596-607) - Background

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autophosphorylation and full activation. Once activated, phosphorylates PLCG1, leading to the activation of this lipase and subsequent cleavage of its substrates. In turn, the endoplasmic reticulum releases calcium in the cytoplasm and the nuclear activator of activated T-cells (NFAT) translocates into the nucleus to perform its transcriptional duty. Phosphorylates 2 essential adapter proteins: the linker for activation of T-cells/LAT protein and LCP2. Then, a large number of signaling molecules such as VAV1 are recruited and ultimately lead to lymphokine production, T-cell proliferation and differentiation.

ITK Antibody (aa596-607) - References

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Gibson S.,et al.Blood 82:1561-1572(1993).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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