

# Mouse Itk Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP20745a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q03526</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB50676

## Additional Information

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<b>Other Names</b>	Tyrosine-protein kinase ITK/TSK, IL-2-inducible T-cell kinase, Kinase EMT, Kinase TLK, T-cell-specific kinase, Itk, Emt, Tlk, Tsk
<b>Target/Specificity</b>	This Mouse Itk antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 156-190 amino acids from the N-terminal region of human Mouse Itk.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	Mouse Itk Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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### Background

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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.

## References

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Siliciano J.D., et al. Proc. Natl. Acad. Sci. U.S.A. 89:11194-11198(1992).

Heyeck S.D., et al. Proc. Natl. Acad. Sci. U.S.A. 90:669-673(1993).

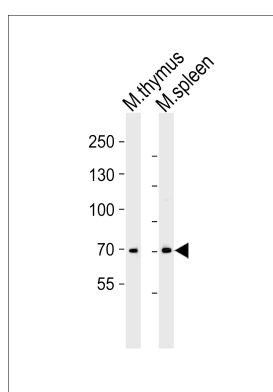
Yamada N., et al. Biochem. Biophys. Res. Commun. 192:231-240(1993).

Ogata M., et al. Submitted (JAN-1993) to the EMBL/GenBank/DDBJ databases.

Liao X.C., et al. Immunity 3:757-769(1995).

## Images

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Western blot analysis of lysates from mouse thymus and mouse spleen tissue lysate (from left to right), using Mouse Itk Antibody (N-term)(Cat. #AP20745a). AP20745a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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