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ARG11026
anti-ITK antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ITK
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ITK
Species	Human
Immunogen	Synthetic peptide taken within aa. 550-600 on Human ITK protein.
Conjugation	Un-conjugated
Alternate Names	LPFS1; Interleukin-2-inducible T-cell kinase; T-cell-specific kinase; Tyrosine-protein kinase ITK/TSK; PSCTK2; EMT; Kinase EMT; Tyrosine-protein kinase Lyk; LYK; IL-2-inducible T-cell kinase; EC 2.7.10.2

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:150

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

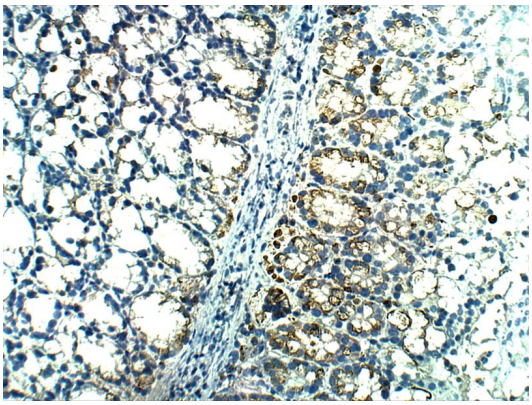
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	Tris, HCl/glycine buffer (pH 7.4 - 7.8), cryo-protective agents, Hepes, 0.02% Sodium azide, 30% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	30% Glycerol and 0.5% BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

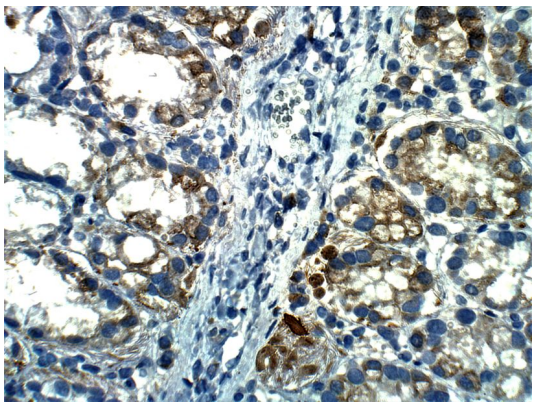
Gene Symbol	ITK
Gene Full Name	IL2-inducible T-cell kinase
Background	This gene encodes an intracellular tyrosine kinase expressed in T-cells. The protein contains both SH2 and SH3 domains which are often found in intracellular kinases. It is thought to play a role in T-cell proliferation and differentiation. [provided by RefSeq, Jul 2008]
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. [UniProt]
Calculated Mw	72 kDa
PTM	Phosphorylated at Tyr-512 in the activation loop of the kinase domain by LCK. Subsequent autophosphorylation at Tyr-180 leads to the kinase activation. The autophosphorylated Tyr-180 lies within the substrate binding sequence of the SH3 domain. Ubiquitinated. [UniProt]

Images



ARG11026 anti-ITK antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Mouse large intestine tissue stained with ARG11026 anti-ITK antibody at 1:100 dilution. (20X magnification)



ARG11026 anti-ITK antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Mouse large intestine tissue stained with ARG11026 anti-ITK antibody at 1:100 dilution. (40X magnification)