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Anti-TXK / RLK Antibody (aa515-527)

Goat Anti Human Polyclonal Antibody
Catalog # ALS17857

Specification

Anti-TXK / RLK Antibody (aa515-527) - Product Information

Application	**IHC-P, E**
Primary Accession	P42681
Predicted	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**61258**

Anti-TXK / RLK Antibody (aa515-527) - Additional Information

Gene ID 7294

Alias Symbol **TXK**

Other Names
TXK, PSCTK5, PTK4 protein tyrosine kinase 4, Resting lymphocyte kinase, RLK, TKL, Tyrosine kinase, Tyrosine-protein kinase TXK, Protein-tyrosine kinase 4, BTKL, PTK4, TXK tyrosine kinase

Target/Specificity
Human TXK.

Reconstitution & Storage
Immunoaffinity purified

Precautions
Anti-TXK / RLK Antibody (aa515-527) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-TXK / RLK Antibody (aa515-527) - Protein Information

Name TXK

Synonyms PTK4, RLK

Function
Non-receptor tyrosine kinase that plays a redundant role with ITK 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 leads to the recruitment of TXK to the cell membrane, where it is phosphorylated at Tyr-420. Phosphorylation leads to TXK full activation. Also contributes to signaling from many receptors and participates in multiple downstream pathways, including regulation of the actin cytoskeleton. Like ITK, can phosphorylate PLCG1, leading to its localization in lipid rafts and activation, followed by 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. Plays a role in the positive regulation of IFNG transcription in T- helper 1 cells as part of an IFNG promoter-binding complex with PARP1 and EEF1A1 (PubMed:11859127, PubMed:17177976). Within the complex, phosphorylates both PARP1 and EEF1A1 (PubMed:17177976). Also phosphorylates key sites in LCP2 leading to the up-regulation of Th1 preferred cytokine IL-2. Phosphorylates 'Tyr-201' of CTLA4 which leads to the association of PI-3 kinase with the CTLA4 receptor.

Cellular Location
Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Note=Localizes in the vicinity of cell surface receptors in the plasma membrane after receptor stimulation Translocates into the nucleus and enhances IFN-gamma gene transcription in T-cells

Tissue Location
Expressed in T-cells and some myeloid cell lines. Expressed in Th1/Th0 cells with IFN-gamma-producing potential

Anti-TXK / RLK Antibody (aa515-527) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TXK / RLK Antibody (aa515-527) - Images