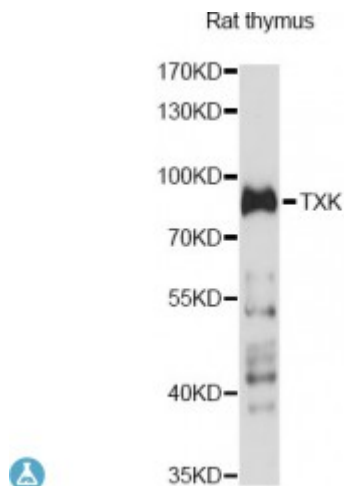


Anti-TXK Antibody



Model	STJ116992
Host	Rabbit
Reactivity	Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-180 of human TXK (NP_003319.2).
Gene ID	7294
Gene Symbol	TXK
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Expressed in T-cells and some myeloid cell lines, Expressed in Th1/Th0 cells with IFN-gamma-producing potential
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Tyrosine-protein kinase TXK
Molecular Weight	61.258 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:12434 OMIM:600058 Reactome:R-HSA-2871809

Alternative Names	Tyrosine-protein kinase TXK
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 lead to the recruitment of TXK to the cell membrane, where it is phosphorylated at Tyr-420, Phosphorylation leads to TXK full activation, Contributes also 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, With PARP1 and EEF1A1, TXK forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFNG to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production, Phosphorylates both PARP1 and EEF1A1, Phosphorylates also 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 Localization	Cytoplasm,
Post-translational Modifications	Phosphorylated at Tyr-420 by FYN, Autophosphorylation at Tyr-91 is critical for the activation of TXK, leading to the up-regulation of IFN-gamma gene transcription,