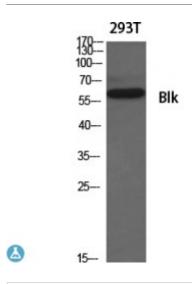


Anti-Blk antibody



Description Rabbit polyclonal to Blk.

Model STJ91857

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IHC

Immunogen Synthesized peptide derived from human Blk around the non-phosphorylation

site of Y501.

Immunogen Region 440-520 aa

Gene ID <u>640</u>

Gene Symbol <u>BLK</u>

Dilution range IHC 1:100-1:300ELISA 1:40000

Specificity Blk Polyclonal Antibody detects endogenous levels of Blk protein.

Tissue Specificity Expressed in lymphatic organs, pancreatic islets, Leydig cells, striate ducts of

salivary glands and hair follicles.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Tyrosine-protein kinase Blk B lymphocyte kinase p55-Blk

Molecular Weight 57.706 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:1057OMIM:191305</u>

Alternative Names Tyrosine-protein kinase Blk B lymphocyte kinase p55-Blk

Function Non-receptor tyrosine kinase involved in B-lymphocyte development,

differentiation and signaling. B-cell receptor (BCR) signaling requires a tight regulation of several protein tyrosine kinases and phosphatases, and associated coreceptors. Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation. Signaling through BLK

plays an important role in transmitting signals through surface

immunoglobulins and supports the pro-B to pre-B transition, as well as the signaling for growth arrest and apoptosis downstream of B-cell receptor. Specifically binds and phosphorylates CD79A at 'Tyr-188'and 'Tyr-199', as

well as CD79B at 'Tyr-196' and 'Tyr-207'. Phosphorylates also the

immunoglobulin G receptors FCGR2A, FCGR2B and FCGR2C. With FYN and LYN, plays an essential role in pre-B-cell receptor (pre-BCR)-mediated NF-kappa-B activation. Contributes also to BTK activation by indirectly stimulating BTK intramolecular autophosphorylation. In pancreatic islets, acts as a modulator of beta-cells function through the up-regulation of PDX1 and NKX6-1 and consequent stimulation of insulin secretion in response to

glucose.

Cellular Localization Cell membrane. Present and active in lipid rafts. Membrane location is

required for the phosphorylation of CD79A and CD79B.

Post-translational Phosphorylated on tyrosine residues after antibody-mediated surface engagement of the B-cell antigen receptor (BCR). Ubiquitination of a

engagement of the B-cell antigen receptor (BCR). Ubiquitination of activated BLK by the UBE3A ubiquitin protein ligase leads to its degradation by the

ubiquitin-proteasome pathway.

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