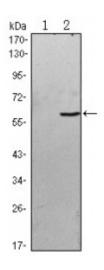


Anti-Blk antibody



Description Mouse monoclonal to Blk.

Model STJ97869

Host Mouse

Reactivity Human

Applications ELISA, FC, IF, WB

Immunogen Purified recombinant fragment of human Blk expressed in E. Coli.

Gene ID 640

Gene Symbol BLK

Dilution range WB 1:500-1:2000IF 1:200-1:1000FC 1:200-1:400ELISA 1:10000

Specificity Blk Monoclonal 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 Affinity purification

Clone ID 1000000

Note For Research Use Only (RUO).

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

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG1

Formulation Ascitic fluid containing 0.03% sodium azide.

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

HGNC:1057OMIM:191305 **Database Links**

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

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

> 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.

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

required for the phosphorylation of CD79A and CD79B.

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

BLK by the UBE3A ubiquitin protein ligase leads to its degradation by the

ubiquitin-proteasome pathway.

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