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BLK Antibody (N-Term, near)

Peptide-affinity purified goat antibody
Catalog # AF3468a

Specification

BLK Antibody (N-Term, near) - Product Information

Application	**WB, IHC**
Primary Accession	P51451
Other Accession	NP_001706.2, 640
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**57706**

BLK Antibody (N-Term, near) - Additional Information

Gene ID 640

Other Names
Tyrosine-protein kinase Blk, 2.7.10.2, B lymphocyte kinase, p55-Blk, BLK

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
BLK Antibody (N-Term, near) is for research use only and not for use in diagnostic or therapeutic procedures.

BLK Antibody (N-Term, near) - Protein Information

Name BLK

Function
Non-receptor tyrosine kinase involved in B-lymphocyte development, differentiation and signaling (By similarity). B-cell receptor (BCR) signaling requires a tight regulation of several protein tyrosine kinases and phosphatases, and associated coreceptors (By similarity). Binding of antigen to the B-cell antigen receptor (BCR) triggers signaling that ultimately leads to B-cell activation (By similarity). 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 (By similarity). Specifically binds and phosphorylates CD79A at 'Tyr-188'and 'Tyr-199', as well as CD79B at 'Tyr-196' and 'Tyr-207' (By

similarity). Also phosphorylates the immunoglobulin G receptors FCGR2A, FCGR2B and FCGR2C (PubMed:8756631). With FYN and LYN, plays an essential role in pre-B- cell receptor (pre-BCR)-mediated NF-kappa-B activation (By similarity). Also contributes to BTK activation by indirectly stimulating BTK intramolecular autophosphorylation (By similarity). 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 (PubMed:19667185). Phosphorylates CGAS, promoting retention of CGAS in the cytosol (PubMed:30356214).

Cellular Location
Cell membrane; Lipid-anchor. Note=Present and active in lipid rafts. Membrane location is required for the phosphorylation of CD79A and CD79B (By similarity).

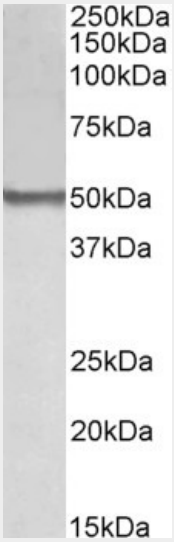
Tissue Location
Expressed in lymphatic organs, pancreatic islets, Leydig cells, striate ducts of salivary glands and hair follicles

BLK Antibody (N-Term, near) - 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

BLK Antibody (N-Term, near) - Images



AF3468a (0.1 µg/ml) staining of Human Thymus lysate (35 µg protein in RIPA buffer). Detected by chemiluminescence.

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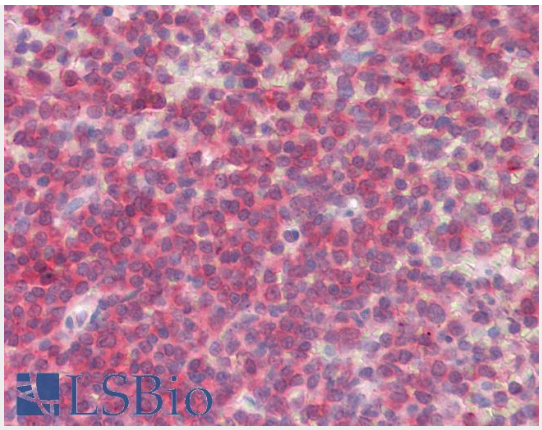

AF3468a (3.75 µg/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

BLK Antibody (N-Term, near) - References

Isoforms of the Ets transcription factor NERF/ELF-2 physically interact with AML1 and mediate opposing effects on AML1-mediated transcription of the B cell-specific blk gene. Cho JY, Akbarali Y, Zerbini LF, Gu X, Boltax J, Wang Y, Oettgen P, Zhang DE, Libermann TA, The Journal of biological chemistry 2004 May 279 (19): 19512-22. PMID: 14970218