

BLNK Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1582a

Specification

BLNK Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype

Calculated MW **Description**

WB, IHC, FC, ICC, E <u>08WV28</u>

Human, Mouse Mouse

Monoclonal IgG1

68kDa KDa

This gene encodes a cytoplasmic linker or adaptor protein that plays a critical role in B cell development. This protein bridges B cell receptor-associated kinase activation with downstream signaling pathways, thereby affecting various biological functions. The phosphorylation of five tyrosine residues is necessary for this protein to nucleate distinct signaling effectors following B cell receptor activation. Mutations in this gene cause hypoglobulinemia and absent B cells, a disease in which the pro- to pre-B-cell transition is developmentally blocked. Deficiency in this protein has also been shown in some cases of pre-B acute lymphoblastic leukemia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Immunogen

Purified recombinant fragment of human BLNK expressed in E. Coli.

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Formulation

Ascitic fluid containing 0.03% sodium azide.

BLNK Antibody - Additional Information

Gene ID 29760

Other Names

B-cell linker protein, B-cell adapter containing a SH2 domain protein, B-cell adapter containing a Src homology 2 domain protein, Cytoplasmic adapter protein, Src homology 2 domain-containing leukocyte protein of 65 kDa, SLP-65, BLNK, BASH, SLP65

Dilution

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000

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

BLNK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BLNK Antibody - Protein Information

Name BLNK

Synonyms BASH, SLP65

Function

Functions as a central linker protein, downstream of the B- cell receptor (BCR), bridging the SYK kinase to a multitude of signaling pathways and regulating biological outcomes of B-cell function and development. Plays a role in the activation of ERK/EPHB2, MAP kinase p38 and INK. Modulates AP1 activation. Important for the activation of NF-kappa-B and NFAT. Plays an important role in BCR- mediated PLCG1 and PLCG2 activation and Ca(2+) mobilization and is required for trafficking of the BCR to late endosomes. However, does not seem to be required for pre-BCR-mediated activation of MAP kinase and phosphatidyl-inositol 3 (PI3) kinase signaling. May be required for the RAC1-INK pathway. Plays a critical role in orchestrating the pro-B cell to pre-B cell transition. May play an important role in BCR- induced B-cell apoptosis.

Cellular Location

Cytoplasm. Cell membrane. Note=BCR activation results in the translocation to membrane fraction

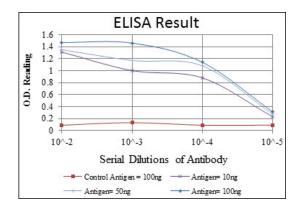
Tissue Location

Expressed in B-cell lineage and fibroblast cell lines (at protein level). Highest levels of expression in the spleen, with lower levels in the liver, kidney, pancreas, small intestines and colon

BLNK Antibody - 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





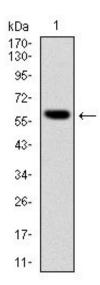


Figure 1: Western blot analysis using BLNK mAb against human BLNK (AA: 34-216) recombinant protein. (Expected MW is 60 kDa)

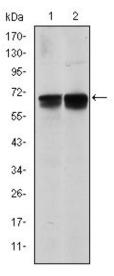


Figure 2: Western blot analysis using BLNK mouse mAb against NIH/3T3 (1) and BCBL-1 (2) cell lysate.

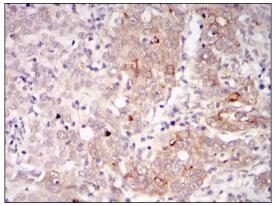


Figure 3: Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues using BLNK mouse mAb with DAB staining.



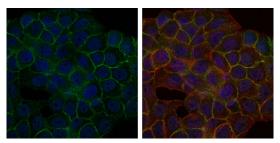


Figure 4: Immunofluorescence analysis of HepG2 cells using BLNK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

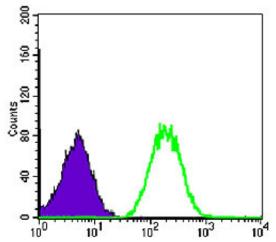


Figure 5: Flow cytometric analysis of NIH/3T3 cells using BLNK mouse mAb (green) and negative control (purple).

BLNK Antibody - References

1. J Biol Chem. 2009 Apr 10;284(15):9804-13. 2. Cancer Sci. 2008 Dec;99(12):2444-54.