

BLNK Antibody

Purified Mouse Monoclonal Antibody Catalog # A01582a

Specification

BLNK Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, IHC, FC, ICC, E <u>O8WV28</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.

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 JNK. 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-JNK 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

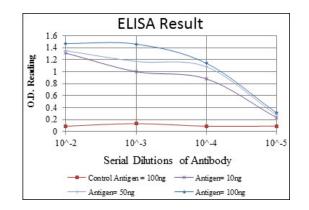
Tissue Location

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



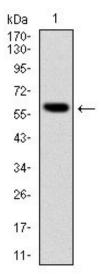


Figure 1: Western blot analysis using BLNK mAb against human BLNK (AA: 34-216) recombinant protein. (Expected MW is 60 kDa)

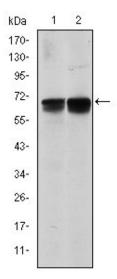


Figure 2: Western blot analysis using BLNK mouse mAb against NIH/3T3 (1) and BCBL-1 (2) cell lysate.

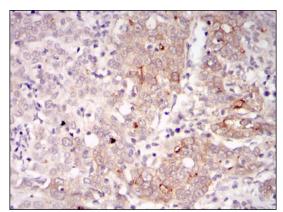


Figure 3: Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues using BLNK mouse mAb with DAB staining.



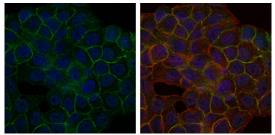


Figure 4: Immunofluorescence analysis of HepG2 cells using BLNK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

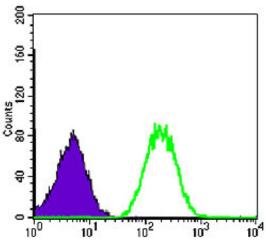


Figure 5: Flow cytometric analysis of NIH/3T3 cells using BLNK mouse mAb (green) and negative control (purple).

BLNK Antibody - References

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