10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BLNK Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1582a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q8WV28
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Clone Names	5G9
Isotype	IgG1
Calculated MW	50466
Description	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.

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.

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

References

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

Images

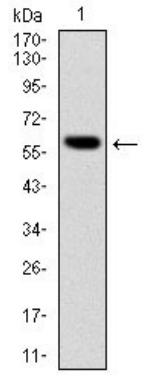


Figure 1: Western blot analysis using BLNK mAb against human BLNK (AA: 34-216) recombinant protein. (Expected MW is 60 kDa)

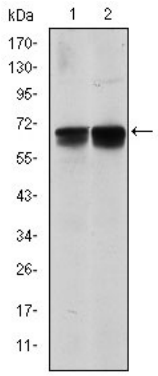


Figure 2: Western blot analysis using BLNK mouse mAb against NIH/3T3 (1) and BCBL-1 (2) cell lysate.

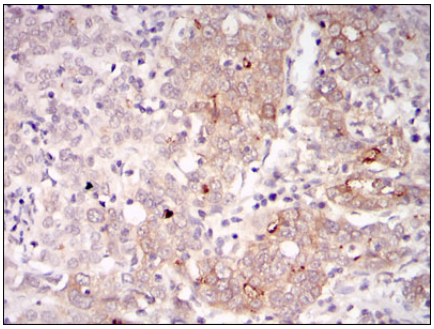


Figure 3: Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues using BLNK mouse mAb with DAB staining.

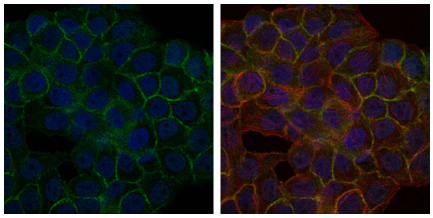


Figure 4: Immunofluorescence analysis of HepG2 cells using BLNK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

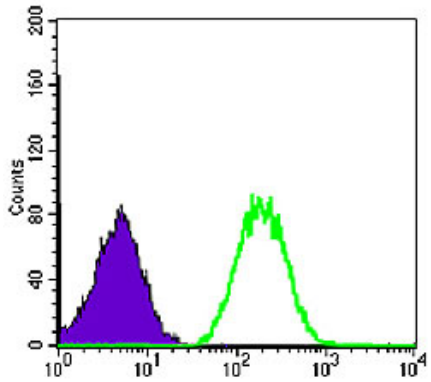


Figure 5: Flow cytometric analysis of NIH/3T3 cells using BLNK mouse mAb (green) and negative control (purple).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.