

# **BLNK Antibody (Ascites)**

Mouse Monoclonal Antibody (Mab) Catalog # AM2071a

#### **Product Information**

**Application** WB, E **Primary Accession** Q8WV28

Other Accession NP\_001107566.1

Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype IgM

Clone Names520CT6.1.1Calculated MW50466Antigen Region150-178

### **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

**Target/Specificity**This BLNK antibody is generated from mice immunized with a KLH conjugated

synthetic peptide between 150-178 amino acids from human BLNK.

**Dilution** WB~~1:500~8000 E~~Use at an assay dependent concentration.

**Format** Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V)

sodium azide.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**BLNK Antibody (Ascites) 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

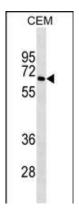
## **Background**

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.

#### References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010):
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Oellerich, T., et al. Mol. Cell Proteomics 8(7):1738-1750(2009)
Imamura, Y., et al. J. Biol. Chem. 284(15):9804-9813(2009)
Li, H., et al. PLoS ONE 4 (7), E6410 (2009):

## **Images**



BLNK Antibody (Cat. #AM2071a) western blot analysis in CEM cell line lysates (35µg/lane). This demonstrates the BLNK antibody detected the BLNK protein (arrow).

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