

## **BLNK Monoclonal Antibody**

Catalog No: YM0068

**Reactivity:** Human; Mouse

**Applications:** WB;IHC;IF;FCM;ELISA

Target: BLNK

Fields: >>NF-kappa B signaling pathway;>>Osteoclast differentiation;>>B cell receptor

signaling pathway;>>Epstein-Barr virus infection;>>Primary immunodeficiency

Gene Name: BLNK

**Protein Name:** B-cell linker protein

**Q8WV28** 

Q9QUN3

Human Gene Id: 29760

**Human Swiss Prot** 

No:

Mouse Gene Id: 17060

**Mouse Swiss Prot** 

No:

**Immunogen:** Purified recombinant fragment of human BLNK expressed in E. Coli.

**Specificity:** BLNK Monoclonal Antibody detects endogenous levels of BLNK protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry:

1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

**Purification :** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

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Molecularweight: 50kD

**Cell Pathway :** B\_Cell\_Antigen;Primary immunodeficiency;

**P References :** 1. J Biol Chem. 2009 Apr 10;284(15):9804-13.

2. Cancer Sci. 2008 Dec;99(12):2444-54.

**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 have been found

for this gene. [provided by RefSeq, May 2012],

**Function:** disease:Defects in BLNK are the cause of hypoglobulinemia and absent B-cells

[MIM:604515]. This is a developmental blockage at the pro- to pre-B-cell

transition., disease: In 6 of 34 childhood pre-B acute lymphoblastic leukemia (ALL) samples that were tested showed a complete loss or drastic reduction of BLNK expression., function: Functions as a central linker protein that bridges kinases associated with the B-cell receptor (BCR) with a multitude of signaling pathways, 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 ac

Subcellular Cyton Location : memb

Cytoplasm . Cell membrane . BCR activation results in the translocation to

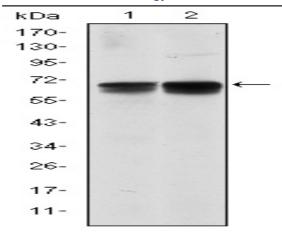
membrane fraction.

**Expression:** Expressed in B-cell lineage and fibroblast cell lines (at protein level). Highest

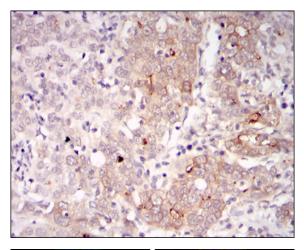
levels of expression in the spleen, with lower levels in the liver, kidney, pancreas,

small intestines and colon.

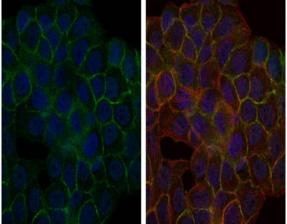
## **Products Images**



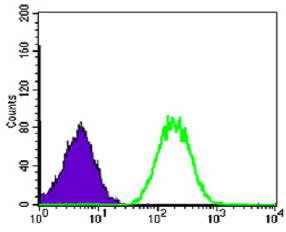
Western Blot analysis using BLNK Monoclonal Antibody against NIH/3T3 (1) and BCBL-1 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human cervical cancer tissues with DAB staining using BLNK Monoclonal Antibody.



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



Flow cytometric analysis of NIH/3T3 cells using BLNK Monoclonal Antibody (green) and negative control (purple).

