

## **BLNK Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP6502c

### **Specification**

## **BLNK Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

BLNK Antibody (Center) Blocking Peptide - 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

**Q8WV28** 

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6502c>AP6502c</a> was selected from the Center region of human BLNK. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

# **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## **BLNK Antibody (Center) Blocking Peptide - 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 (Center) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

## • Blocking Peptides

**BLNK Antibody (Center) Blocking Peptide - Images** 

# **BLNK Antibody (Center) Blocking Peptide - Background**

BLNK is 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 its gene cause hypoglobulinemia and absent B cells, a disease in which the proto pre-B-cell transition is developmentally blocked. Deficiency in this protein has also been shown in some cases of pre-B acute lymphoblastic leukemia.

## **BLNK Antibody (Center) Blocking Peptide - References**

Imamura, Y., J. Biol. Chem. 284 (15), 9804-9813 (2009) Kamino, H., Cancer Sci. 99 (12), 2444-2454 (2008)