

# Human BLNK / Ly-57 / SLP-65 Protein (His Tag)

Catalog Number: 12706-H07H



**Sino Biological Inc.**  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

AGM4; BASH; bca; BLNK-S; LY57; SLP-65; SLP65; BASH; Bca; Ly-57; Ly57; Lyw-57; SLP-65

### Protein Construction:

A DNA sequence encoding the human BLNK isoform 1 (AAH18906.1) (Met 1-Ser 456) was fused with a polyhistidine tag at the N-terminus.

**Source:** Human

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 90 % as determined by SDS-PAGE

### Bio Activity:

**Measured by its ability to bind human BTK in a functional ELISA.**

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** His

### Molecular Mass:

The recombinant human BLNK consists of 476 amino acids and has a calculated molecular mass of 53 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh BLNK is approximately 95-100 kDa due to glycosylation.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

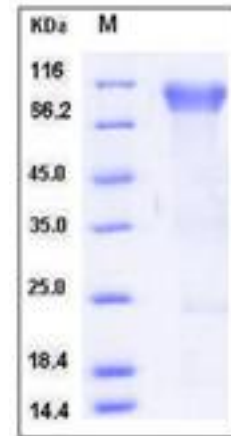
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

B-cell linker protein, also known as 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 and BLNK, is a cytoplasm and cell membrane protein which contains one SH2 domain. BLNK is expressed in B-cell lineage and fibroblast cell lines. Highest levels of expression is in the spleen, with lower levels in the liver, kidney, pancreas, small intestines and colon. BLNK 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. BLNK plays a role in the activation of ERK / EPHB2, MAP kinase p38 and JNK. BLNK modulates AP1 activation. It is important for the activation of NF-kappa-B and NFAT. BLNK plays an important role in BCR-mediated PLCG1 and PLCG2 activation and Ca<sup>2+</sup> mobilization and is required for trafficking of the BCR to late endosomes. BLNK may be required for the RAC1-JNK pathway. It plays a critical role in orchestrating the pro-B cell to pre-B cell transition. BLNK also plays an important role in BCR-induced B-cell apoptosis. Defects in BLNK are the cause of agammaglobulinemia type 4 (AGM4) which is a primary immunodeficiency characterized by profoundly low or absent serum antibodies and low or absent circulating B cells due to an early block of B-cell development.

## References

1. Fu C., et al., 1998, Immunity 9:93-103.
2. Minegishi Y., et al., 1999, Science 286:1954-1957.
3. Chiu C.W., et al., 2002, EMBO J. 21:6461-6472.

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