

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

Catalog No. PKSH030792

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

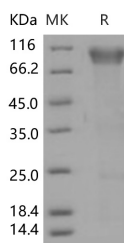
### Description

<b>Synonyms</b>	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
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Ser 456
<b>Accession</b>	AAH18906.1
<b>Calculated Molecular Weight</b>	53.0 kDa
<b>Observed molecular weight</b>	95-100 kDa
<b>Tag</b>	N-His
<b>Bioactivity</b>	Measured by its ability to bind human BTK in a functional ELISA.

### Properties

<b>Purity</b>	> 90 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 90 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

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.

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