

Recombinant Protein Technical Manual Recombinant Human BLNK/Ly-57 Protein (His Tag)(Active) **RPES4841**

Product SKU: RPES4841	Size: 2

Species: Human

20µg

Expression host: HEK293 Cells

Uniprot: AAH18906.1

Molecular Mass:	53 kDa
AP Molecular Mass:	9500 kDa
Tag:	N-His
Bio-activity:	Measured by its ability to bind human BTK in a functional ELISA.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per μg as determined by the LAL method.
Storage:	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.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	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

Sequence: Met 1-Ser 456

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 and Ca2+ 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.