Product Name: **BLNK (phospho Tyr96) Rabbit Polyclonal Antibody**
Catalog #: **APRab04325**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Monkey
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	50kDa

Antigen Information

Gene Name	BLNK
Alternative Names	BLNK; BASH; SLP65; 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;
Gene ID	29760.0
SwissProt ID	Q8WV28
Immunogen	The antiserum was produced against synthesized peptide derived from human BLNK around the phosphorylation site of Tyr96. AA range:62-111

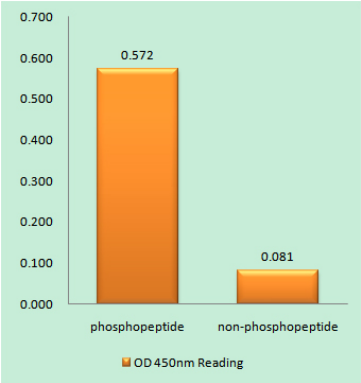
Background

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],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 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 (By similarity). Plays an important role in BCR-induced B-cell apoptosis.,online information:BLNK mutation db,PTM:Following BCR activation, phosphorylated on tyrosine residues by SYK and LYN. When phosphorylated, serves as a scaffold to assemble downstream targets of antigen activation, including PLCG1, VAV1, GRB2 and NCK1. Phosphorylation of Tyr-84, Tyr-178 and Tyr-189 facilitates PLCG1 binding. Phosphorylation of Tyr-96 facilitates BTK binding. Phosphorylation of Tyr-72 facilitates VAV1 and NCK1 binding. Phosphorylation is required for both Ca(2+) and MAPK signaling pathways.,similarity:Contains 1 SH2 domain.,subcellular location:BCR activation results in the translocation to membrane fraction.,subunit:Associates with PLCG1, VAV1 and NCK1 in a B-cell antigen receptor-dependent fashion. Interacts with VAV3, PLCG2 and GRB2. Interacts through its SH2 domain with CD79A.,tissue specificity: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.,

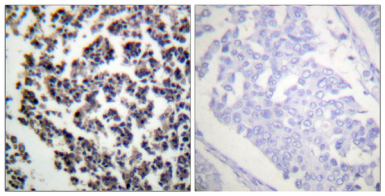
Research Area

B_Cell_Antigen;Primary immunodeficiency;

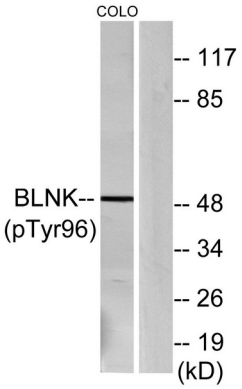
Image Data



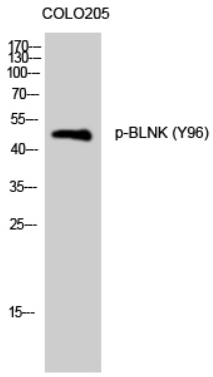
Enzyme-Linked Immunosorbent Assay （Phospho-ELISA） for Immunogen Phosphopeptide （Phospho-left） and Non-Phosphopeptide （Phospho-right）, using BLNK （Phospho-Tyr96） Antibody



Immunohistochemistry analysis of paraffin-embedded human lymph node, using BLNK （Phospho-Tyr96） Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COLO205 cells, using BLNK （Phospho-Tyr96） Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of COLO205 cells using Phospho-BLNK （Y96） Polyclonal Antibody