

---

**Product Name: BLNK (phospho Tyr84) Rabbit Polyclonal Antibody****Catalog #: APRab04324**

For research use only.

**Summary**

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

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	65kDa

**Antigen Information**

<b>Gene Name</b>	BLNK BLNK; BASH; SLP65; B-cell linker protein; B-cell adapter containing a SH2 domain protein; B-
<b>Alternative Names</b>	cell adapter containing a Src homology 2 domain protein; Cytoplasmic adapter protein; Src homology 2 domain-containing leukocyte protein of 65 kDa;
<b>Gene ID</b>	29760.0
<b>SwissProt ID</b>	Q8WV28
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human BLNK around the phosphorylation site of Tyr84. AA range:50-99

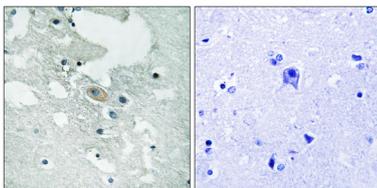
## Background

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 phosphatidylinositol 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.,

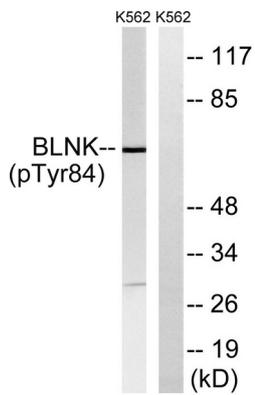
## Research Area

B\_Cell\_Antigen;Primary immunodeficiency;

## Image Data



Immunohistochemistry analysis of paraffin-embedded human brain, using BLNK (Phospho-Tyr84) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from K562 cells treated with starved 24h, using BLNK (Phospho-Tyr84) Antibody. The lane on the right is blocked with the phospho peptide.