

**Product Name: BLNK Rabbit Polyclonal Antibody**  
**Catalog #: APRab07580**



## Summary

<b>Production Name</b>	BLNK Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	BLNK
<b>Alternative Names</b>	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;
<b>Gene ID</b>	29760.0
<b>SwissProt ID</b>	Q8WV28.The antiserum was produced against synthesized peptide derived from human BLNK. AA range:62-111

## Application

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

## Background

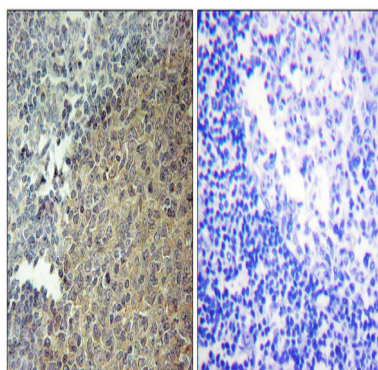
This gene encodes a cytoplasmic linker or adaptor protein that plays a critical role in B cell development. This protein bridges B cell receptor-associated kinase activation with downstream signaling pathways, thereby affecting various biological functions. The phosphorylation of five tyrosine residues 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

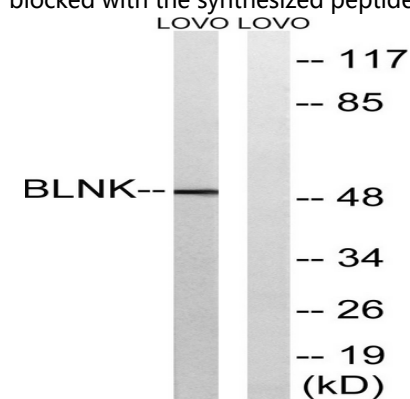
B\_Cell\_Antigen;Primary immunodeficiency;

## Image Data

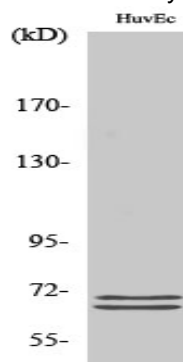
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Immunohistochemistry analysis of paraffin-embedded human tonsil tissue, using BLNK Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from LOVO cells, treated with etoposide 25uM 24h, using BLNK Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using BLNK Polyclonal Antibody

## Note

For research use only.