

Rabbit Anti-Phospho-BLNK (Tyr189) antibody

SL9688R

Product Name:	Phospho-BLNK (Tyr189)
Chinese Name:	磷酸化Tlymphocyte连接蛋白抗体
Alias:	BLNK (phospho Y189); p-BLNK (phospho Tyr189); B cell adapter containing SH2 domain protein; B cell adapter containing Src homology 2 domain protein; B cell linker; B cell linker protein; B-cell adapter containing a SH2 domain protein; B-cell adapter containing a Src homology 2 domain protein; B-cell linker protein; BASH; BASH; Bca; Bca; BLNK; BLNK s; BLNK_HUMAN; Cytoplasmic adapter protein; Ly 57; Ly-57; Ly57; Lymphocyte antigen 57; Lymphocyte antigen-57; Lyw 57; Lyw-57; Lyw57; MGC111051; SLP 65; SLP-65; Src homology 2 domain containing leukocyte protein of 65 kDa.
Ouganism Species	Rabbit
Organism Species: Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	65kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human BLNK around the phosphorylation site of Tyr189:EN(p-Y)IH
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>

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].

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. Plays an important role in BCR-induced B-cell apoptosis.

Product Detail:

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.

Subcellular Location:

Cytoplasm. Cell membrane. Note=BCR activation results in the translocation to membrane fraction.

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.

Post-translational modifications:

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.

DISEASE:

Defects in BLNK are the cause of agammaglobulinemia type 4 (AGM4) [MIM:613502]. It 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. Affected individuals develop severe infections in the first years of life.

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Similarity:

Contains 1 SH2 domain.

SWISS:

Q8WV28

Gene ID:

29760

Database links:

Entrez Gene: 29760Human

Entrez Gene: 17060Mouse

Entrez Gene: 499356Rat

Omim: 604515Human

SwissProt: Q8WV28Human

SwissProt: Q9QUN3Mouse

SwissProt: Q4KM52Rat

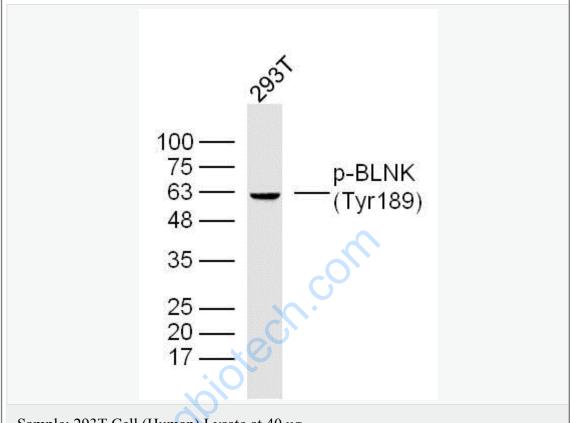
Unigene: 665244Human

Unigene: 9749Mouse

Unigene: 32684Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

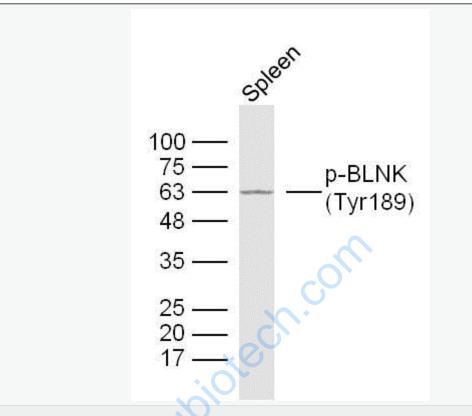
Sample: 293T Cell (Human) Lysate at 40 ug

Primary: Anti-Phospho-BLNK(Tyr189) (SL9688R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 65 kD

Observed band size: 63 kD



Sample: Spleen (Mouse) Lysate at 40 ug

Primary: Anti-Phospho-BLNK(Tyr189) (SL9688R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 65 kD

Observed band size: 63 kD