# abcam

### Product datasheet

# Anti-BLNK antibody ab73706

### ★★★★ 1 Abreviews 2 Images

#### Overview

Product name Anti-BLNK antibody

**Description** Rabbit polyclonal to BLNK

Host species Rabbit

**Tested applications** Suitable for: WB, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse

**Immunogen** A synthesized non-phosphopeptide derived from human BLNK around the phosphorylation site of

tyrosine 96.

**Positive control** Human tonsil tissue sections and extracts from 293 cells treated with etoposide.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride, PBS

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

1

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab73706 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	<b>★★★★☆ (1)</b>	1/500 - 1/1000. Detects a band of approximately 51 kDa (predicted molecular weight: 51 kDa).
IHC-P		Use at an assay dependent concentration.

#### **Target**

#### **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 (Pl3) 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.

#### **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.

#### Involvement in 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.

# Sequence similarities

Contains 1 SH2 domain.

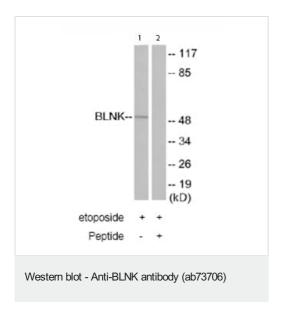
# Post-translational modifications

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.

#### **Cellular localization**

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

#### **Images**



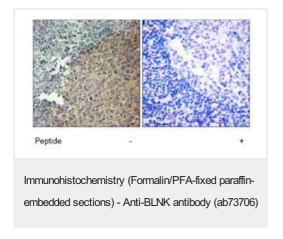
All lanes: Anti-BLNK antibody (ab73706) at 1/500 dilution

**Lane 1 :** Extracts from 293 cells, treated with etoposide ( $25\mu M$ , 24hours).

**Lane 2 :** Extracts from 293 cells, treated with etoposide ( $25\mu M$ , 24hours) plus  $5\mu g$  immunizing peptide.

Lysates/proteins at 5 µg per lane.

**Predicted band size:** 51 kDa **Observed band size:** 51 kDa



Immunohistochemistry analysis of paraffin-embedded human tonsil tissue using ab73706 at a 1:50 dilution.

Left image un-treated.

Right image treated with immunizing peptide.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

# Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

# Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors