SANTA CRUZ BIOTECHNOLOGY, INC.

# BLNK (SPM164): sc-52987

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

Cross-linking of the B cell receptor (BCR) activates a variety of signaling pathways involved in processes such as cell proliferation and apoptosis. Intracellular protein tyrosine kinases such as Syk and Lyn have been implicated in this BCR signal transduction and are thought to play an important role in B cell development. BLNK (for B cell linker protein) is a central linker protein in B cells which has been shown to associate with the effector proteins GRB2, Vav, NCK and PLC γ following activation of the B cell receptor. The two forms of BLNK, p68 and p70, arise from alternate splicing of the human BLNK gene transcript. BLNK is phosphorylated by the Syk tyrosine kinase, which in turn permits activation of downstream effector proteins including GRB2 and PLC γ.

## REFERENCES


1. DeFranco, A.L. 1997. The complexity of signaling pathways activated by the BCR. Curr. Opin. Immunol. 9: 296-308.
2. Kurosaki, T. 1997. Molecular mechanisms in B cell antigen receptor signaling. Curr. Opin. Immunol. 9: 309-318.
3. Reth, M. and Wienands, J. 1997. Initiation and processing of signals from the B cell antigen receptor Ann. Rev. Immunol.15: 453-479.
4. Fu, C. and Chan, A.C. 1997. Identification of two tyrosine phosphoproteins, pp70 and pp68, which interact with phospholipase C γ, GRB2 and Vav after B cell antigen receptor activation. J. Biol. Chem. 272: 27362-27368.


## CHROMOSOMAL LOCATION

Genetic locus: BLNK (human) mapping to 10q23.33; Blnk (mouse) mapping to 19 C3.

## SOURCE

BLNK (SPM164) is a mouse monoclonal antibody raised against recombinant BLNK protein corresponding to amino acids 4-205 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

BLNK (SPM164) is recommended for detection of BLNK of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for BLNK siRNA (h): sc-29810, BLNK shRNA Plasmid (h): sc-29810-SH and BLNK shRNA (h) Lentiviral Particles: sc-29810-V.

Molecular Weight of BLNK p68: 68 kDa.

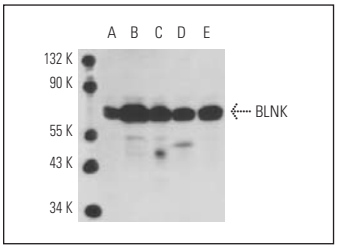
Molecular Weight of BLNK p70: 70 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, Ramos cell lysate: sc-2216 or NAMALWA cell lysate: sc-2234.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

## DATA




BLNK (SPM164): sc-52987. Western blot analysis of BLNK expression in BJAB (**A**), Ramos (**B**), NAMALWA (**C**), Daudi (**D**) and Raji (**E**) whole cell lysates.

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.