SANTA CRUZ BIOTECHNOLOGY, INC.

# Blk (K-23): sc-329


The Power to Question

## BACKGROUND

Src is the human homolog of the v-Src gene of the Rous sarcoma virus, also known as avian sarcoma virus or ASV. Src was the first proto-oncogenic non-receptor tyrosine kinase characterized in human. Based on common structural motifs, the Src family is composed of nine members in vertebrates, including Src, Yes, Fgr, Frk, Fyn, Lyn, Hck, Lck and Blk. Src family kinases transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility and adhesion. Src-family kinases contain an amino terminal cell membrane anchor followed by an SH3 domain and an SH2 domain involved in modular association and activation, respectively. Src family kinases are normally maintained in an inactive state and can be activated transiently during cellular events such as mitosis. Different subcellular localizations of Src-family kinases may be important for the regulation of specific cellular processes such as mitogenesis, cyto-skeletal organization and membrane trafficking. The human B lymphocyte kinase gene maps to chromosome 8p23.1 and encodes a 505 amino acid protein, known as Blk. Blk is expressed exclusively by B lymphocytes.

## CHROMOSOMAL LOCATION

Genetic locus: BLK (human) mapping to 8p23.1; Blk (mouse) mapping to 14 D1.

## SOURCE

Blk (K-23) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of Blk of mouse origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-329 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Blk (K-23) is recommended for detection of Blk of mouse, rat and 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 (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Blk siRNA (h): sc-39227, Blk siRNA (m): sc-39228, Blk shRNA Plasmid (h): sc-39227-SH, Blk shRNA Plasmid (m): sc-39228-SH, Blk shRNA (h) Lentiviral Particles: sc-39227-V and Blk shRNA (m) Lentiviral Particles: sc-39228-V.

Molecular Weight of Blk: 58 kDa.

Positive Controls: NAMALWA cell lysate: sc-2234 or Ramos cell lysate: sc-2216.

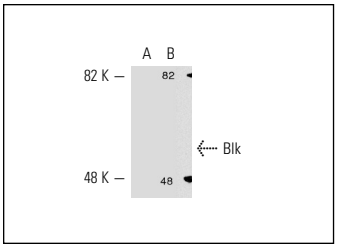
## STORAGE

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

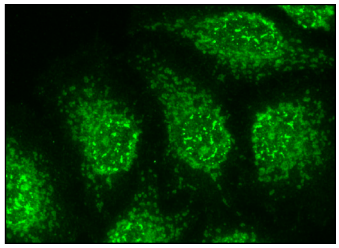
## RESEARCH USE

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

## DATA




Blk (K-23): sc-329. Western blot analysis of Blk expression in NAMALWA (**A**) and Ramos (**B**) whole cell lysates.



Blk (K-23): sc-329. Immunofluorescence staining of methanol-fixed HeLa cells showing mitochondrial localization.

## SELECT PRODUCT CITATIONS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4. Boyd, R.S., et al. 2003. Proteomic analysis of the cell-surface membrane in chronic lymphocytic leukemia: identification of two novel proteins, BCNP1 and MIG2B. Leukemia 17: 1605-1612.
5. Lannutti, B.J., et al. 2003. Identification and activation of Src family kinases in primary megakaryocytes. Exp. Hematol. 31: 1268-1274.
6. Kurokawa, M., et al. 2004. Evidence that activation of Src family kinase is not required for fertilization-associated $Ca^{2+}$i oscillations in mouse eggs. Reproduction 127: 441-454.
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