BANK1 (S-12): sc-133359



The Power to Question

BACKGROUND

BANK1 (B cell scaffold protein with ankyrin repeats) is a 785 amino acid protein that contains one DBB domain and 2 ANK (ankyrin) repeats. Expressed in a variety of B cells with particularly high expression in CD19+ B cells, BANK1 interacts with Lyn, IP3R-I and IP3R-II and is involved in B cell receptor-induced calcium mobilization from intracellular calcium stores. Via its association with Lyn, BANK1 promotes Lyn-mediated tyrosine phosphorylation of IP3R-I and IP3R-II, an event that activates B cells and may be required for antigen-induced immune responses within the body. Defects in the gene encoding BANK1 increase the genetic susceptibility to systemic lupus erythematosus (SLE), a chronic inflammatory disorder that affects joints, skin, serosal membranes and kidney tissue. BANK1 exists as four isoforms that are produced by alternative splicing events.

REFERENCES

- Yokoyama, K., Su Ih, I.H., Tezuka, T., Yasuda, T., Mikoshiba, K., Tarakhovsky, A. and Yamamoto, T. 2002. BANK regulates BCR-induced calcium mobilization by promoting tyrosine phosphorylation of IP(3) receptor. EMBO J. 21: 83-92.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 610292. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Aiba, Y., Yamazaki, T., Okada, T., Gotoh, K., Sanjo, H., Ogata, M. and Kurosaki, T. 2006. BANK negatively regulates Akt activation and subsequent B cell responses. Immunity 24: 259-268.
- 4. Kozyrev, S.V., Abelson, A.K., Wojcik, J., Zaghlool, A., Linga Reddy, M.V., Sanchez, E., Gunnarsson, I., Svenungsson, E., Sturfelt, G., Jönsen, A., Truedsson, L., Pons-Estel, B.A., Witte, T., D'Alfonso, S., Barizzone, N., et al. 2008. Functional variants in the B cell gene BANK1 are associated with systemic lupus erythematosus. Nat. Genet. 40: 211-216.
- Kozyrev, S.V., Abelson, A.K., Wojcik, J., Zaghlool, A., Linga Reddy, M.P., Sanchez, E., Gunnarsson, I., Svenungsson, E., Sturfelt, G., Jönsen, A., Truedsson, L., Pons-Estel, B.A., Witte, T., D'Alfonso, S., Barrizzone, N., et al. 2008. Corrigendum: Functional variants in the B cell gene BANK1 are associated with systemic lupus erythematosus. Nat. Genet. 40: 484.

CHROMOSOMAL LOCATION

Genetic locus: BANK1 (human) mapping to 4q24.

SOURCE

BANK1 (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of BANK1 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133359 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

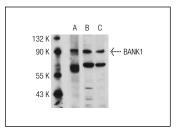
BANK1 (S-12) is recommended for detection of BANK1 isoforms 1-4 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BANK1 siRNA (h): sc-89307, BANK1 shRNA Plasmid (h): sc-89307-SH and BANK1 shRNA (h) Lentiviral Particles: sc-89307-V.

Molecular Weight (predicted) of BANK1: 89 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, PC-3 cell lysate: sc-2220 or mouse lymph node extract: sc-364243.

DATA



BANK1 (S-12): sc-133359. Western blot analysis of BANK1 expression in mouse lymph node tissue extract (A), HeLa (B) and PC-3 (C) 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.



Try **BANK1 (F-8):** sc-393611, our highly recommended monoclonal alternative to BANK1 (S-12).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com