SANTA CRUZ BIOTECHNOLOGY, INC.

Crk-L (H-62): sc-9005

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SH2 and SH3 (Src homology) domains were originally identified as critical functional domains within non-receptor proteins with tyrosine kinase activity. A subset of these proteins appears to exist predominately of SH2/SH3 domains in the absence of detectable catalytic domains. One of the first members of the family to be identified, Crk, is a transformation-specific protein that induces elevation of cellular phosphotyrosine levels, but lacks tyrosine kinase activity itself. A second protein, Nck, consists solely of three SH3 domains and one SH2 domain, while GRB2 contains an SH2 domain flanked on both sides by SH3 domains. A member of this protein class, Crk-L, is encoded by a gene located on chromosome 22, band 11, centromeric of the chronic myelogenous leukemia breakpoint region. Crk-L encodes a 303 amino acid protein with one SH2 and 2 SH3 domains.

REFERENCES

1. Mayer, B., et al. 1988. A novel viral oncogene with structural similarity to phospholipase C. Nature 332: 272-275.
2. Lehmann, J.M., et al. 1990. Nck, a melanoma cDNA encoding a cytoplasmic protein consisting of the Src homology units SH2 and SH3. Nucleic Acids Res. 18: 1048.

CHROMOSOMAL LOCATION

Genetic locus: CRKL (human) mapping to 22q11.21; Crkl (mouse) mapping to 16 A3.

SOURCE

Crk-L (H-62) is a rabbit polyclonal antibody raised against amino acids 181-242 of Crk-L of human origin.

PRODUCT

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

APPLICATIONS

Crk-L (H-62) is recommended for detection of Crk-L 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Crk-L (H-62) is also recommended for detection of Crk-L in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for Crk-L siRNA (h): sc-35114, Crk-L siRNA (m): sc-35115, Crk-L shRNA Plasmid (h): sc-35114-SH, Crk-L shRNA Plasmid (m): sc-35115-SH, Crk-L shRNA (h) Lentiviral Particles: sc-35114-V and Crk-L shRNA (m) Lentiviral Particles: sc-35115-V.

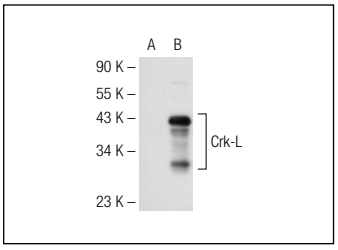
Molecular Weight of Crk-L: 36 kDa.

Positive Controls: Crk-L (h2): 293T Lysate: sc-128366.

STORAGE

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

DATA



Crk-L (H-62): sc-9005. Western blot analysis of Crk-L expression in non-transfected: sc-117752 (**A**) and human Crk-L transfected: sc-128366 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Lauten, M., et al. 2003. Expression of heat-shock protein 90 in glucocorticoid-sensitive and -resistant childhood acute lymphoblastic leukaemia. Leukemia 17: 1551-1556.
2. Lauten, M., et al. 2003. Protein expression of the glucocorticoid receptor in childhood acute lymphoblastic leukemia. Haematologica 88: 1253-1258.
3. Mishra, S., et al. 2006. Resistance to imatinib of Bcr/Abl P190 lymphoblastic leukemia cells. Cancer Res. 66: 5387-5393.
4. Gutiérrez-Berzal, J., et al. 2006. Characterization of p87C3G, a novel, truncated C3G isoform that is overexpressed in chronic myeloid leukemia and interacts with Bcr-Abl. Exp. Cell Res. 312: 938-948.
5. Kaur, P., et al. 2007. Nilotinib treatment in mouse models of P190 Bcr/Abl lymphoblastic leukemia. Mol. Cancer 6: 67.
6. Della Peruta, M., et al. 2010. Protein tyrosine phosphatase receptor type γ is a functional tumor suppressor gene specifically downregulated in chronic myeloid leukemia. Cancer Res. 70: 8896-8906.
7. Bellisola, G., et al. 2010. Tracking infrared signatures of drugs in cancer cells by Fourier transform microspectroscopy. Analyst 135: 3077-3086.

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.