

Crk-L (A-1): sc-365471

BACKGROUND

SH2 and SH3 (Src homology) domains were originally identified as critical functional domains within non-receptor proteins with tyrosine kinase activity. 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 22q11.21, band 11, centromeric of the chronic myelogenous leukemia breakpoint region. Crk-L encodes a 303 amino acid protein with one SH2 and two 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.
3. Koch, C.A., et al. 1991. SH2 and SH3 domains: elements that control interactions of cytoplasmic signaling proteins. *Science* 252: 668-674.

CHROMOSOMAL LOCATION

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

SOURCE

Crk-L (A-1) is a mouse monoclonal antibody raised against amino acids 181-242 of Crk-L of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Crk-L (A-1) is recommended for detection of Crk-L of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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.

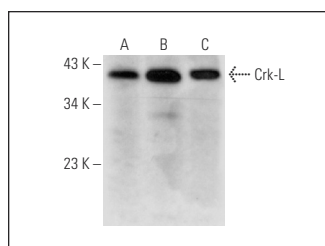
Molecular Weight of Crk-L: 36 kDa.

Positive Controls: Crk-L (h2): 293T Lysate: sc-128366, A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

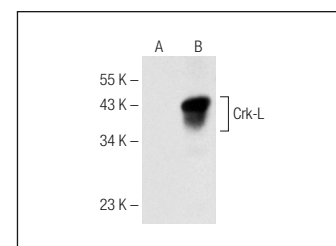
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Crk-L (A-1): sc-365471. Western blot analysis of Crk-L expression in HeLa (A), A-431 (B) and NIH/3T3 (C) whole cell lysates.



Crk-L (A-1): sc-365471. 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. Voisinne, G., et al. 2016. Co-recruitment analysis of the CBL and CBLB signalosomes in primary T cells identifies CD5 as a key regulator of TCR-induced ubiquitylation. *Mol. Syst. Biol.* 12: 876.
2. Shi, X., et al. 2018. MicroRNA-379 suppresses cervical cancer cell proliferation and invasion by directly targeting v-Crk avian sarcoma virus CT10 oncogene homolog-like (Crk-L). *Oncol. Res.* 26: 987-996.
3. Zhang, H. and Lu, W. 2018. LncRNA SNHG12 regulates gastric cancer progression by acting as a molecular sponge of miR-320. *Mol. Med. Rep.* 17: 2743-2749.
4. Collins, T.N., et al. 2018. Crk proteins transduce FGF signaling to promote lens fiber cell elongation. *Elife* 7 pii: e32586.
5. Shi, X., et al. 2020. Xanthoplanine attenuates macrophage polarization towards M1 and inflammation response via disruption of CrkL-Stat5 complex. *Arch. Biochem. Biophys.* 683: 108325.

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.