SANTA CRUZ BIOTECHNOLOGY, INC.

# CRP2BP (2221C4a): sc-81072

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

CRP2BP (cysteine-rich protein 2-binding protein, CSRP2-binding protein) is a 782 amino acid member of the cysteine- and glycine-rich protein family (CRP1, CRP2 and CRP3), which contain two zinc-binding LIM domains, LIM1 (amino-terminal) and LIM2 (carboxyl-terminal). This group is implicated in diverse cellular processes linked to differentiation, growth control and pathogenesis. The LIM domain is a conserved cysteine and histidine-containing structural module of two tandemly arranged zinc fingers. It has been identified in single or multiple copies in a variety of regulatory proteins. CRP2BP specifically interacts with the double LIM domain protein CRP2. Although present in cytoplasm, CRP2BP is mainly a nuclear protein, with highest expression in skeletal muscle and heart.

## REFERENCES


1. Okano, I., Yamamoto, T., Kaji, A., Kimura, T., Mizuno, K. and Nakamura, T. 1993. Cloning of CRP2, a novel member of the cysteine-rich protein family with two repeats of an unusual LIM/double zinc-finger motif. FEBS Lett. 333: 51-55.
2. Karim, M.A., Ohta, K., Egashira, M., Jinno, Y., Niikawa, N., Matsuda, I. and Indo, Y. 1997. Human ESP1/CRP2, a member of the LIM domain protein family: characterization of the cDNA and assignment of the gene locus to chromosome 14q32.3. Genomics 31: 167-176.
3. Konrat, R., Kräutler, B., Weiskirchen, R. and Bister, K. 1998. Structure of cysteine- and glycine-rich protein CRP2. Backbone dynamics reveal motional freedom and independent spatial orientation of the lim domains. J. Biol. Chem. 273: 23233-23240.
4. Kloiber, K., Weiskirchen, R., Kräutler, B., Bister, K. and Konrat, R. 1999. Mutational analysis and NMR spectroscopy of quail cysteine and glycine-rich protein CRP2 reveal an intrinsic segmental flexibility of LIM domains. J. Mol. Biol. 292: 893-908.
5. Weiskirchen, R. and Gressner, A.M. 2000. The cysteine- and glycine-rich LIM domain protein CRP2 specifically interacts with a novel human protein (CRP2BP). Biochem. Biophys. Res. Commun. 274: 655-663.
6. Weiskirchen, R., Moser, M., Weiskirchen, S., Erdel, M., Dahmen, S., Buettner, R. and Gressner, A.M. 2001. LIM-domain protein cysteine- and glycine-rich protein 2 (CRP2) is a novel marker of hepatic stellate cells and binding partner of the protein inhibitor of activated Stat1. Biochem. J. 359: 485-496.


## CHROMOSOMAL LOCATION

Genetic locus: CSRP2BP (human) mapping to 20p11.23; Csrp2bp (mouse) mapping to 2 G1.

## SOURCE

CRP2BP (2221C4a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the N-terminal region of CRP2BP of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 100 µg $IgG_1$ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

## APPLICATIONS

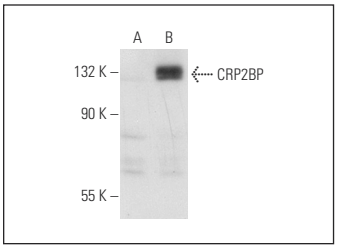
CRP2BP (2221C4a) is recommended for detection of CRP2BP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for CRP2BP siRNA (h): sc-77030, CRP2BP siRNA (m): sc-142581, CRP2BP shRNA Plasmid (h): sc-77030-SH, CRP2BP shRNA Plasmid (m): sc-142581-SH, CRP2BP shRNA (h) Lentiviral Particles: sc-77030-V and CRP2BP shRNA (m) Lentiviral Particles: sc-142581-V.

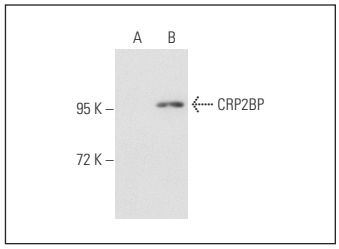
Molecular Weight of CRP2BP: 89 kDa.

Positive Controls: CRP2BP (h): 293T Lysate: sc-172463, A-673 nuclear extract: sc-2128 or CRP2BP (m): 293T Lysate: sc-126668.

## DATA




CRP2BP (2221C4a): sc-81072. Western blot analysis of CRP2BP expression in non-transfected: sc-117752 (**A**) and human CRP2BP transfected: sc-172463 (**B**) 293T whole cell lysates.




CRP2BP (2221C4a): sc-81072. Western blot analysis of CRP2BP expression in non-transfected: sc-117752 (**A**) and mouse CRP2BP transfected: sc-126668 (**B**) 293T whole cell lysates.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## PROTOCOLS

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