

CRP2BP (G-2): sc-390057

BACKGROUND

CRP2BP (cysteine-rich protein 2-binding protein, CSR2-binding protein) is a 782 amino acid protein encoded by the human gene CSR2BP. CRP2BP specifically interacts with the double LIM domain protein CRP2. 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, either in combination with defined functional domains, like homeodomains, or alone, like in the CRP family of LIM proteins. Members of the cysteine- and glycine-rich protein family (CRP1, CRP2 and CRP3) contain two zinc-binding LIM domains, LIM1 (amino-terminal) and LIM2 (carboxyl-terminal), and are implicated in diverse cellular processes linked to differentiation, growth control and pathogenesis. Although present in cytoplasm, CRP2BP is mainly a ubiquitously expressed nuclear protein, with highest expression in skeletal muscle and heart.

REFERENCES

- 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.
- 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: CSR2BP (human) mapping to 20p11.23; Csrp2bp (mouse) mapping to 2 G1.

SOURCE

CRP2BP (G-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 621-659 within an internal region of CRP2BP of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390057 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

CRP2BP (G-2) is recommended for detection of CRP2BP 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).

CRP2BP (G-2) is also recommended for detection of CRP2BP in additional species, including equine and porcine.

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.

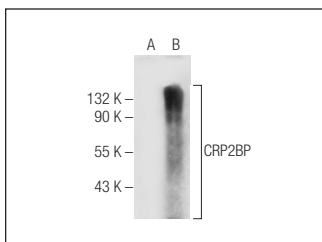
Molecular Weight of CRP2BP: 89 kDa.

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

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



CRP2BP (G-2): sc-390057. Western blot analysis of CRP2BP expression in non-transfected: sc-117752 (A) and human CRP2BP transfected: sc-172463 (B) 293T 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.