BACKGROUND
Cysteine-rich proteins (CRPs) participate in the organization of multiprotein complexes, both in the cytoplasm, where they participate in cytoskeletal remodeling, and in the nucleus, where they facilitate smooth muscle differentiation. CRP1 (cysteine and glycine-rich protein 1), also known as CRP, CSRPI or CYRP, is abundant in the prostate and smooth muscle lineages. It contains two LIM zinc-binding domains and is localized in the nucleus. The LIM domains of CRP1 are critical for binding to the adhesion-plaque protein Zyxin. CRP1 also interacts with α-actinin to mediate muscle differentiation. These associations indicate that the main function of CRP1 may be structural.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: CSR1 (human) mapping to 1q32.1; Crsp1 (mouse) mapping to 1E4.

SOURCE
CRP1 (F-12) is a mouse monoclonal antibody raised against amino acids 8-96 mapping near the N-terminus of CRP1 of human origin.

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

CRP1 (F-12) is available conjugated to agarose (sc-390418 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390418 HRP), 200 µg/ml, for WB, IHCIP and ELISA; to either phycoerythrin (sc-390418 PE), fluorescein (sc-390418 FITC), Alexa Fluor® 488 (sc-390418 AF488), Alexa Fluor® 546 (sc-390418 AF546), Alexa Fluor® 594 (sc-390418 AF594) or Alexa Fluor® 647 (sc-390418 AF647), 200 µg/ml, for WB (RGB), IF, IHCIP and FCM; and to either Alexa Fluor® 680 (sc-390418 AF680) or Alexa Fluor® 790 (sc-390418 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS
CRP1 (F-12) is recommended for detection of CRP1 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), 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 1:30-1:300).

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGk BP-HRP: sc-516102 or m-IgGk 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-IgGk BP-FTC: sc-516140 or m-IgGk BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or Ultra-Cruz® Hot-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGk BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA
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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.