CRP3 (A-5): sc-166930

BACKGROUND

Cysteine and glycine-rich protein 3 (CRP3), also known as cysteine-rich protein 3, CLP (cardiac LIM protein), MLP (muscle LIM protein), LMO4 or CMD1M, is an essential nuclear regulator of myogenic differentiation. CRP3 contains two LIM zinc-binding domains linked to short glycine-rich repeats and a potential nuclear localization signal. CRP3 is present in differentiated heart during early development and in a subset of other striated muscles during later stages. Defects in the gene encoding CRP3 (CSR3P) can cause dilated cardiomyopathy 1M (CMD1M), a disease characterized by reduced systolic function and cardiac dilation. Human CSR3P maps to the gene locus 11p15.1.

CHROMOSOMAL LOCATION

Genetic locus: CSR3P (human) mapping to 11p15.1; Csrp3 (mouse) mapping to 7 B4.

SOURCE

CRP3 (A-5) is a mouse monoclonal antibody raised against amino acids 77-122 mapping within an internal region of CRP3 of human origin.

PRODUCT

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

CRP3 (A-5) is available conjugated to agarose (sc-166930 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166930 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycocerythrin (sc-166930 PE), fluorescein (sc-166930 FITC), Alexa Fluor® 488 (sc-166930 AF488), Alexa Fluor® 546 (sc-166930 AF546), Alexa Fluor® 594 (sc-166930 AF594) or Alexa Fluor® 647 (sc-166930 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166930 AF680) or Alexa Fluor® 790 (sc-166930 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

CRP3 (A-5) is recommended for detection of CRP3 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 1:30-1:3000).

Suitable for use as control antibody for CRP3 siRNA (h): sc-106928, CRP3 siRNA (m): sc-45933, CRP3 shRNA Plasmid (h): sc-106928-SH, CRP3 shRNA Plasmid (m): sc-45933-SH, CRP3 shRNA (h) Lentiviral Particles: sc-106928-V and CRP3 shRNA (m) Lentiviral Particles: sc-45933-V.

Molecular Weight of CRP3: 24 kDa.

Positive Controls: human heart extract: sc-363763, mouse heart extract: sc-2254 or rat heart extract: sc-2393.

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-HP (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-2030 (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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

CRP3 (A-5) sc-166930: Near-infrared western blot analysis of CRP3 expression in mouse heart (A), rat heart (B), human skeletal muscle (C) and human heart (D) tissue extracts. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used m-IgGκ BP-CFL 880: sc-516180.

SELECT PRODUCT CITATIONS


RESEARCH USE

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

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