SANTA CRUZ BIOTECHNOLOGY, INC.

CRIP2 (G-12): sc-166813



BACKGROUND

Cysteine-rich protein 2 (CRIP2) is a 208 amino acid protein that contains two LIM zinc-binding domains that link to short glycine-rich repeats, and a potential nuclear localization signal. CRIP proteins 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. CRIP2 tissue expression is widespread, with highest levels in the heart. The human CRIP2 gene maps to chromosome 14q32.33.

REFERENCES

- 1. Okano, I., et al. 1993. Cloning of CRP2, a novel member of the cysteinerich protein family with two repeats of an unusual LIM/double zinc-finger motif. FEBS Lett. 300: 51-55.
- 2. Karim, M.A., et al. 1996. 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. Huber, A., et al. 2000. Cysteine-rich protein 2, a novel substrate for cGMP kinase I in enteric neurons and intestinal smooth muscle. J. Biol. Chem. 275: 5504-5511.
- 4. Chang, Y.F., et al. 2003. Identification of a CArG-independent region of the cysteine-rich protein 2 promoter that directs expression in the developing vasculature. Am. J. Physiol. Heart Circ. Physiol. 285: H1675-H1683.
- 5. Chang, D.F., et al. 2003. Cysteine-rich LIM-only proteins CRP1 and CRP2 are potent smooth muscle differentiation cofactors. Dev. Cell 1: 107-118.
- 6. Wei, J., 2005. Increased neointima formation in cysteine-rich protein 2deficient mice in response to vascular injury. Circ. Res. 97: 1323-1331.
- 7. Schmidtko, A., 2008. Cysteine-rich protein 2, a novel downstream effector of cGMP/cGMP-dependent protein kinase I-mediated persistent inflammatory pain. J. Neurosci. 28: 1320-1330.
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- 9. SWISS-PROT/TrEMBL (P52943). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html.

CHROMOSOMAL LOCATION

Genetic locus: Crip2 (mouse) mapping to 12 F1.

SOURCE

CRIP2 (G-12) is a mouse monoclonal antibody raised against amino acids 68-121 mapping within an internal region of CRIP2 of mouse origin.

PRODUCT

Each vial contains 200 μ g lgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

CRIP2 (G-12) is recommended for detection of CRIP2 of mouse and rat 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 CRIP2 siRNA (m): sc-142572, CRIP2 shRNA Plasmid (m): sc-142572-SH and CRIP2 shRNA (m) Lentiviral Particles: sc-142572-V.

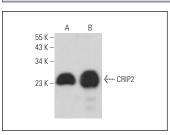
Molecular Weight of CRIP2: 22 kDa.

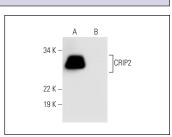
Positive Controls: rat heart extract: sc-2393, C2C12 whole cell lysate: sc-364188 or mouse heart extract: sc-2254.

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-FITC: sc-516140 or m-IgGk 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





CRIP2 (G-12): sc-166813. Western blot analysis of CRIP2 expression in C2C12 whole cell lysate (A) and rat heart tissue extract (B).

CRIP2 (G-12): sc-166813. Western blot analysis of CRIP2 expression in mouse heart (A) and human heart (B) tissue extracts. Note lack of reactivity with human CRIP2 in lane B

STORAGE

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

PROTOCOLS

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