SANTA CRUZ BIOTECHNOLOGY, INC.

# CRIP2 (C-2): sc-271659

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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 cysteine-rich protein family with two repeats of an unusual LIM/double zinc-finger motif. FEBS Lett. 333: 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 4: 107-118.
6. Wei, J., et al. 2005. Increased neointima formation in cysteine-rich protein 2-deficient mice in response to vascular injury. Circ. Res. 97: 1323-1331.
7. Schmidtko, A., et al. 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.


## CHROMOSOMAL LOCATION

Genetic locus: CRIP2 (human) mapping to 14q32.33; Crip2 (mouse) mapping to 12 F1.

## SOURCE

CRIP2 (C-2) is a mouse monoclonal antibody raised against amino acids 69-121 mapping within an internal region of CRIP2 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CRIP2 (C-2) is available conjugated to agarose (sc-271659 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271659 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271659 PE), fluorescein (sc-271659 FITC), Alexa Fluor® 488 (sc-271659 AF488), Alexa Fluor® 546 (sc-271659 AF546), Alexa Fluor® 594 (sc-271659 AF594) or Alexa Fluor® 647 (sc-271659 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271659 AF680) or Alexa Fluor® 790 (sc-271659 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

CRIP2 (C-2) is recommended for detection of CRIP2 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).

Suitable for use as control antibody for CRIP2 siRNA (h): sc-106947, CRIP2 siRNA (m): sc-142572, CRIP2 shRNA Plasmid (h): sc-106947-SH, CRIP2 shRNA Plasmid (m): sc-142572-SH, CRIP2 shRNA (h) Lentiviral Particles: sc-106947-V and CRIP2 shRNA (m) Lentiviral Particles: sc-142572-V.

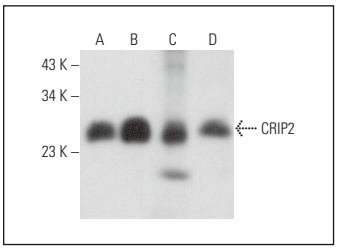
Molecular Weight of CRIP2: 22 kDa.

Positive Controls: U-251-MG whole cell lysate: sc-364176, HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

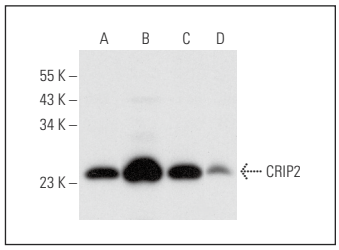
## RECOMMENDED SUPPORT REAGENTS

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




CRIP2 (C-2): sc-271659. Western blot analysis of CRIP2 expression in MCF7 (**A**) and SK-BR-3 (**B**) whole cell lysates and human placenta (**C**) and mouse brain (**D**) tissue extracts.




CRIP2 (C-2): sc-271659. Western blot analysis of CRIP2 expression in HeLa (**A**), MCF7 (**B**), MDA-MB-435S (**C**) and U-251-MG (**D**) 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.