SANTA CRUZ BIOTECHNOLOGY, INC.

CRIP2 (H-10): sc-398980

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

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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.
8. Lin, D.W., et al. 2008. Transforming growth factor β up-regulates cysteine-rich protein 2 in vascular smooth muscle cells via activating transcription factor 2. J. Biol. Chem. 283: 15003-15014.

CHROMOSOMAL LOCATION

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

SOURCE

CRIP2 (H-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 189-208 at the C-terminus of CRIP2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-398980 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

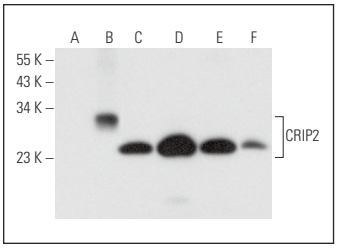
CRIP2 (H-10) is recommended for detection of CRIP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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: CRIP2 (h2): 293T Lysate: sc-172837, MCF7 whole cell lysate: sc-2206 or MDA-MB-435S whole cell lysate: sc-364184.

DATA



CRIP2 (H-10): sc-398980. Western blot analysis of CRIP2 expression in non-transfected 293T: sc-117752 (**A**), human CRIP2 transfected 293T: sc-172837 (**B**), HeLa (**C**), MCF7 (**D**), MDA-MB-435S (**E**) and U-251-MG (**F**) 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.

PROTOCOLS

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