



CRIP1 (C-13): sc-131472

BACKGROUND

The LIM gene family is comprised of over 40 members in vertebrates and invertebrates, which are characterized by the presence of a LIM domain, a unique cysteine-rich zinc-binding domain. Proteins containing LIM domains are often involved in mediating cell differentiation. CRIP1 (Cysteine-rich intestinal protein), also designated Cysteine-rich protein 1 (CRP-1) or Cysteine-rich heart protein (CRHP), contains one LIM domain and is highly expressed in intestine, immune cells, prostate, colon, brain and testis. CRIP1 is thought to play a role in proliferation and differentiation of cells with rapid turnover, such as those found in the intestine and immune system. CRIP1 has also been identified as a novel marker for the early detection of cancers.

REFERENCES

1. Tsui, S.K., Yam, N.Y., Lee, C.Y. and Waye, M.M. 1994. Isolation and characterization of a cDNA that codes for a LIM-containing protein which is developmentally regulated in heart. *Biochem. Biophys. Res. Commun.* 205: 497-505.
2. Perez-Alvarado, G.C., Kosa, J.L., Louis, H.A., Beckerle, M.C., Winge, D.R. and Summers, M.F. 1996. Structure of the cysteine-rich intestinal protein, CRIP. *J. Mol. Biol.* 257: 153-174.
3. Khoo, C., Blanchard, R.K., Sullivan, V.K. and Cousins, R.J. 1997. Human cysteine-rich intestinal protein: cDNA cloning and expression of recombinant protein and identification in human peripheral blood mononuclear cells. *Protein Expr. Purif.* 9: 379-387.
4. Dube, J.Y., Chapdelaine, P., Trahan, P.L., Deperthes, D., Frenette, G. and Tremblay, R.R. Abundant cysteine-rich protein-1 is localized in the stromal compartment of the human prostate. *Arch. Androl.* 40: 109-115.
5. Davis, B.A., Blanchard, R.K., Lanningham-Foster, L. and Cousins, R.J. 1998. Structural characterization of the rat cysteine-rich intestinal protein gene and overexpression of this LIM-only protein in transgenic mice. *DNA Cell Biol.* 17: 1057-1064.
6. Garcia-Barcelo, M., Tsui, S.K., Chim, S.S., Fung, K.P., Lee, C.Y. and Waye, M.M. 1998. Mapping of the human cysteine-rich intestinal protein gene CRIP1 to the human chromosomal segment 7q11.23. *Genomics* 47: 419-422.
7. Cousins, R.J. and Lanningham-Foster, L. 2000. Regulation of cysteine-rich intestinal protein, a zinc finger protein, by mediators of the immune response. *J. Infect. Dis.* 182: S81-S84.
8. Hao, J., Serohijos, A.W., Newton, G., Tassone, G., Wang, Z., Sgroi, D.C., Dokholyan, N.V. and Basilion, J.P. 2008. Identification and rational redesign of peptide ligands to CRIP1, a novel biomarker for cancers. *PLoS Comput. Biol.* 4: e1000138.

CHROMOSOMAL LOCATION

Genetic locus: CRIP1 (human) mapping to 14q32.33; Crip1 (mouse) mapping to 12 F1.

SOURCE

CRIP1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CRIP1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-131472 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CRIP1 (C-13) is recommended for detection of CRIP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with family members CRIP2 or CRIP3.

Suitable for use as control antibody for CRIP1 siRNA (h): sc-92384, CRIP1 siRNA (m): sc-142571, CRIP1 shRNA Plasmid (h): sc-92384-SH, CRIP1 shRNA Plasmid (m): sc-142571-SH, CRIP1 shRNA (h) Lentiviral Particles: sc-92384-V and CRIP1 shRNA (m) Lentiviral Particles: sc-142571-V.

Molecular Weight of CRIP1: 9 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.