

CIRP (Z-25): sc-133460

BACKGROUND

CIRP, also known as CIRBP (cold inducible RNA binding protein) or A18HNRNP, is a 172 amino acid protein that localizes to the nucleus and contains one RRM (RNA recognition motif) domain. Expressed ubiquitously, CIRP is thought to play an essential role in the suppression of cellular proliferation in response to UV irradiation or extreme cold. Human CIRP, which may be involved in the pathogenesis of endometrial carcinoma, shares 95% sequence identity with its mouse counterpart, suggesting a conserved role between species. The gene encoding CIRP maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc receptors (FcRs).

REFERENCES

1. Nishiyama, H., et al. 1997. Cloning and characterization of human CIRP (cold-inducible RNA-binding protein) cDNA and chromosomal assignment of the gene. *Gene* 204: 115-120.
2. Sheikh, M.S., et al. 1997. Identification of several human homologs of hamster DNA damage-inducible transcripts. Cloning and characterization of a novel UV-inducible cDNA that codes for a putative RNA-binding protein. *J. Biol. Chem.* 272: 26720-26726.
3. Nishiyama, H., et al. 1997. A glycine-rich RNA-binding protein mediating cold-inducible suppression of mammalian cell growth. *J. Cell Biol.* 137: 899-908.
4. Nishiyama, H., et al. 1998. Decreased expression of cold-inducible RNA-binding protein (CIRP) in male germ cells at elevated temperature. *Am. J. Pathol.* 152: 289-296.
5. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 602649. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Fujita, J. 1999. Cold shock response in mammalian cells. *J. Mol. Microbiol. Biotechnol.* 1: 243-255.
7. Hamid, A.A., et al. 2003. Expression of cold-inducible RNA-binding protein in the normal endometrium, endometrial hyperplasia, and endometrial carcinoma. *Int. J. Gynecol. Pathol.* 22: 240-247.
8. Wellmann, S., et al. 2004. Oxygen-regulated expression of the RNA-binding proteins RBM3 and CIRP by a HIF-1-independent mechanism. *J. Cell Sci.* 117: 1785-1794.

CHROMOSOMAL LOCATION

Genetic locus: CIRBP (human) mapping to 19p13.3.

SOURCE

CIRP (Z-25) is an affinity purified rabbit polyclonal antibody raised against synthetic CIRP peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

CIRP (Z-25) is recommended for detection of CIRP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CIRP siRNA (h): sc-97329, CIRP shRNA Plasmid (h): sc-97329-SH and CIRP shRNA (h) Lentiviral Particles: sc-97329-V.

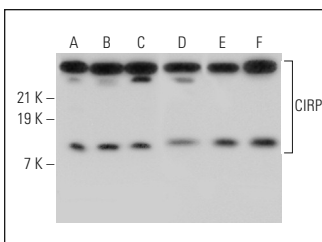
Molecular Weight of CIRP: 18 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CIRP (Z-25): sc-133460. Western blot analysis of CIRP expression in HeLa nuclear extract (A) and Y79 (B), HEK293 (C), Hep G2 (D), Jurkat (E) and A549 (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.


 MONOS
Satisfaction
Guaranteed

Try **CIRP (1C9): sc-293325**, our highly recommended monoclonal alternative to CIRP (Z-25).