SANTA CRUZ BIOTECHNOLOGY, INC.

Hic-5 (C-15): sc-17616

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

In addition to paxillin, zysin, LPP, ajuba and trip-6, hydrogen-peroxide inducible clone 5 (HIC-5) is a member of the LIM family. HIC-5 contains four LIM motifs and seven zinc finger domains. In the cell, HIC-5 localizes to the nuclear matrix and focal adhesion complexes where the LIM domains mediate the interactions of HIC-5 with focal adhesions. Known also as transforming factor beta 1 induced transcript 1, HIC-5 shares extensive homology with the structural protein paxillin, which is involved in the regulation of focal adhesion dynamics. HIC-5 inhibits integrin-mediated cell spreading on fibronectin by out competing paxillin for focal adhesion kinase and thereby preventing downstream signal transduction. Increased expression of HIC-5 leads to cellular senescence in developing fibroblasts. During myogenesis, expression of HIC-5 blocks differentiation and induces apoptosis of developing myoblasts. The gene encoding human HIC-5 maps to chromosome 16.

SOURCE

Hic-5 (C-15) is a goat polyclonal antibody raised against a peptide mapping near the C-terminus of Hic-5 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-17616 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17616 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Hic-5 (C-15) is recommended for detection of Hic-5 of mouse, rat and 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)], 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).

Hic-5 (C-15) is also recommended for detection of Hic-5 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Hic-5 siRNA (h): sc-37685, Hic-5 siRNA (m): sc-37686, Hic-5 shRNA Plasmid (h): sc-37685-SH, Hic-5 shRNA Plasmid (m): sc-37686-SH, Hic-5 shRNA (h) Lentiviral Particles: sc-37685-V and Hic-5 shRNA (m) Lentiviral Particles: sc-37686-V.

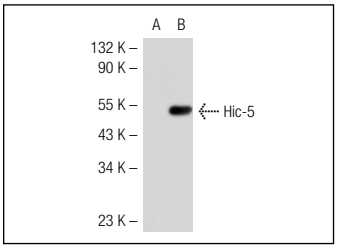
Hic-5 (C-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Hic-5: 55 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Hic-5 (C-15): sc-17616. Western blot analysis of Hic-5 expression in non-transfected: sc-117752 (**A**) and mouse Hic-5 transfected: sc-126953 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Croke, J.M., et al. 2007. The focal adhesion protein Hic-5 is highly expressed in the rat myometrium during late pregnancy and labour and colocalizes with FAK. Reprod. Biol. Endocrinl. 5: 22.

PROTOCOLS

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