SANTA CRUZ BIOTECHNOLOGY, INC.

Hic-5 (H-75): sc-28748

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 β 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.

CHROMOSOMAL LOCATION

Genetic locus: TGFB1I1 (human) mapping to 16p11.2; Tgfb1i1 (mouse) mapping to 7 F3.

SOURCE

Hic-5 (H-75) is a rabbit polyclonal antibody raised against amino acids 1-75 mapping at the N-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-28748 X, 200 µg/0.1 ml.

APPLICATIONS

Hic-5 (H-75) 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), immunohistochemistry (including paraffin-embedded sections) (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 (H-75) is also recommended for detection of Hic-5 in additional species, including canine and porcine.

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 (H-75) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

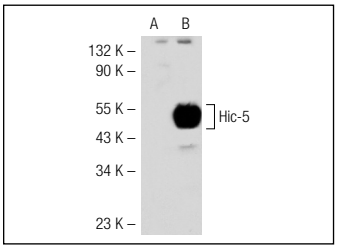
Molecular Weight of Hic-5: 55 kDa.

Positive Controls: Hic-5 (m): 293T Lysate: sc-126953 or HeLa whole cell lysate: sc-2200.

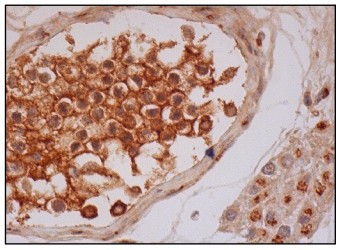
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Hic-5 (H-75): sc-28748. 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.



Hic-5 (H-75): sc-28748. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic, membrane and nuclear staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells.

SELECT PRODUCT CITATIONS

1. Jung, S.H., et al. 2007. Insulin-mimetic and Insulin-sensitizing activities of a pentacyclic triterpenoid Insulin receptor activator. Biochem. J. 403: 243-250.
2. Rathore, V.B., et al. 2007. Paxillin family members function as Csk-binding proteins that regulate Lyn activity in human and murine platelets. Biochem. J. 403: 275-281.

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.