SANTA CRUZ BIOTECHNOLOGY, INC.

Hck (H-85): sc-11401

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Src is the human homolog of the v-src gene of the Rous sarcoma virus, also called avian sarcoma virus or ASV. Src was the first proto-oncogenic non-receptor tyrosine kinase characterized in human. By virtue of common structural motifs, the Src family is composed of nine members in vertebrates, including Src, Yes, Fgr, Frk, Fyn, Lyn, Hck, Lck and Blk. Src-family kinases transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility and adhesion. Src family kinases contain an amino terminal cell membrane anchor followed by an SH3 domain and an SH2 domain involved in modular association and activation, respectively. Src family kinases are normally maintained in an inactive state and can be activated transiently during cellular events such as mitosis. Different subcellular localizations of Src family kinases may be important for the regulation of specific cellular processes such as mitogenesis, cytoskeletal organization and membrane trafficking. The human hemopoietic cell kinase (Hck) gene maps to chromosome 20q11.21; and encodes a 505 amino acid protein. The Hck protein is expressed in hematopoietic cells, and is particularly abundant in granulocytes.

CHROMOSOMAL LOCATION

Genetic locus: HCK (human) mapping to 20q11.21; Hck (mouse) mapping to 2 H1.

SOURCE

Hck (H-85) is a rabbit polyclonal antibody raised against amino acids 1-85 of Hck 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.

STORAGE

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

APPLICATIONS

Hck (H-85) is recommended for detection of Hck of human and, to a lesser extent, mouse and rat 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).

Suitable for use as control antibody for Hck siRNA (h): sc-35536, Hck siRNA (m): sc-35535, Hck shRNA Plasmid (h): sc-35536-SH, Hck shRNA Plasmid (m): sc-35535-SH, Hck shRNA (h) Lentiviral Particles: sc-35536-V and Hck shRNA (m) Lentiviral Particles: sc-35535-V.

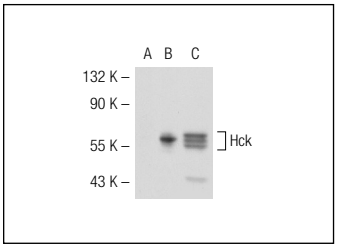
Molecular Weight of Hck: 59 kDa.

Positive Controls: U-937 cell lysate: sc-2239 or HL-60 whole cell lysate: sc-2209.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Hck (H-85): sc-11401. Western blot analysis of Hck expression in non-transfected 293T: sc-117752 (**A**), mouse Hck transfected 293T: sc-126948 (**B**) and HL-60 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Radha, V., et al. 2002. Induction of cytochrome c release and apoptosis by Hck-SH3 domain-mediated signalling requires caspase-3. Apoptosis 7: 195-207.
2. Parravicini, V., et al. 2002. Fyn kinase initiates complementary signals required for IgE-dependent mast cell degranulation. Nature Immunol. 3: 741-748.

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.