SANTA CRUZ BIOTECHNOLOGY, INC.

HCII (74E5): sc-69784

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Heparin cofactor II (HCII) is a glycoprotein in human plasma which rapidly inactivates Thrombin in the presence of dermatan sulfate. Inhibition occurs by formation of a stable equimolar complex between HCII and Thrombin. Certain clinical conditions, such as hepatic failure, disseminated intravascular coagulation, thalasemina and sickle cell anemia, display reduced levels of HCII. However, during pregnancy, physiological levels of HCII expression are elevated. HCII may regulate coagulation and may participate in processes such as inflammation, atherosclerosis and wound repair. HCII is widely distributed among vertebrates and may have a common function in birds, amphibians and mammals. The HCFII gene located on human chromosome 22q11.2, encodes the HCII protein.

REFERENCES

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3. Griffith, M.J., Carraway, T., White, G.C. and Dombrose, F.A. 1983. Heparin cofactor activities in a family with hereditary antithrombin III deficiency: evidence for a second heparin cofactor in human plasma. Blood 61: 111-118.
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8. He, L., Vicente, C.P., Westrick, R.J., Eitzman, D.T. and Tollefsen, D.M. 2002. Heparin cofactor II inhibits arterial thrombosis after endothelial injury. J. Clin. Invest. 109: 213-219.

CHROMOSOMAL LOCATION

Genetic locus: SERPIND1 (human) mapping to 22q11.2.

SOURCE

HCII (74E5) is a mouse monoclonal antibody raised against purified HCII of human origin.

PRODUCT

Each vial contains IgG_{2b} in 100 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

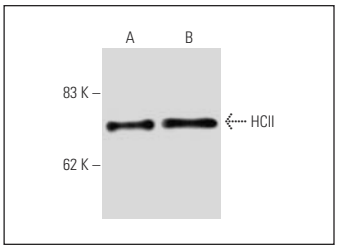
HCII (74E5) is recommended for detection of HCII of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:2500), immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:50-1:2500) and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:30-1:5000).

Suitable for use as control antibody for HCII siRNA (h): sc-72117, HCII shRNA Plasmid (h): sc-72117-SH and HCII shRNA (h) Lentiviral Particles: sc-72117-V.

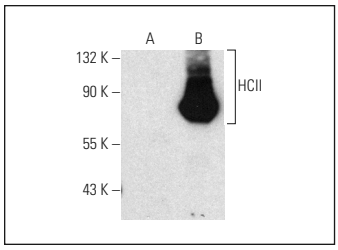
Molecular Weight of HCII: 66 kDa.

Positive Controls: HCII (h5): 293 Lysate: sc-158588, CCRF-CEM cell lysate: sc-2225 or human plasma lysate: sc-364374.

DATA



HCII (74E5): sc-69784. Western blot analysis of HCII purified from human plasma (**A**) and in human plasma (**B**).



HCII (74E5): sc-69784. Western blot analysis of HCII expression in non-transfected: sc-110760 (**A**) and human HCII transfected: sc-158588 (**B**) 293 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.

PROTOCOLS

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