HCII (h5): 293 Lysate: sc-158588



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

- 1. Tollefsen, D.M., Majerus, D.W. and Blank, M.K. 1982. Heparin cofactor II. Purification and properties of a heparin-dependent inhibitor of Thrombin in human plasma. J. Biol. Chem. 257: 2162-2169.
- 2. Friberger, P., Egberg, N., Holmer, E., Hellgren, M. and Blomback, M. 1982. Antithrombin assaythe use of human or bovine Thrombin and the observation of a "second" heparin cofactor. Thromb. Res. 25: 433-436.
- 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.
- 4. Church, F.C. and Griffith, M.J. 1984. Evidence for essential lysines in heparin cofactor II. Biochem. Biophys. Res. Commun. 124: 745-751.
- Toulon, P., Costa, J.M. and Amiral, J. 1992. An enzyme-linked immunosorbent assay for heparin cofactor II (HCII). Application to the measurement of HCII in clinical materials. Clin. Chim. Acta 205: 65-73.
- Rossi, E.B., Duboscq, C.L. and Kordich, L.C. 1999. Heparin cofactor II, a Thrombin inhibitor with a still not clarified physiologic role. Medicina 59: 95-104.
- 7. 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.
- Colwell, N.S., and Tollefsen, D.M.1998. Isolation of frog and chicken cDNAs encoding heparin cofactor II. Thromb. Haemost. 80: 784-790.
- 8. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 142360. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: SERPIND1 (human) mapping to 22q11.21.

PRODUCT

HCII (h5): 293 Lysate represents a lysate of human HCII transfected 293 cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

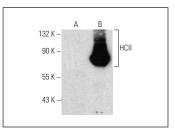
APPLICATIONS

HCII (h5): 293 Lysate is suitable as a Western Blotting positive control for human reactive HCII antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

HCII (74E5): sc-69784 is recommended as a positive control antibody for Western Blot analysis of enhanced human HCII expression in HCII transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



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 brother.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.

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