

HCII (N-18): sc-25250

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, thalassemia 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 22q11.21, encodes the HCII protein.

REFERENCES

1. Tollefsen, D.M., et al. 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., et al. 1982. Antithrombin assay-the use of human or bovine Thrombin and the observation of a "second" heparin cofactor. *Thromb. Res.* 25: 433-436.
3. Griffith, M.J., et al. 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., et al. 1984. Evidence for essential lysines in heparin cofactor II. *Biochem. Biophys. Res. Commun.* 124: 745-751.
5. Toulon, P., et al. 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.

CHROMOSOMAL LOCATION

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

SOURCE

HCII (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HCII 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.

Blocking peptide available for competition studies, sc-25250 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

HCII (N-18) is recommended for detection of HCII of 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).

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.

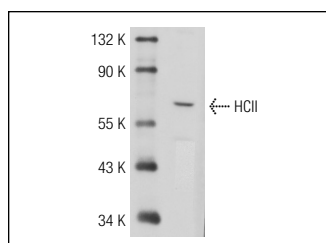
Molecular Weight of HCII: 66 kDa.

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

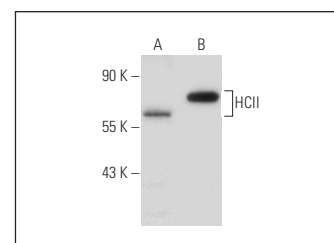
RECOMMENDED SECONDARY REAGENTS

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



HCII (N-18): sc-25250. Western blot analysis of HCII expression in CCRF-CEM whole cell lysate.



HCII (N-18): sc-25250. Western blot analysis of HCII expression in non-transfected: sc-110760 (A) and human HCII transfected: sc-158588 (B) 293 whole cell lysates.

PROTOCOLS

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



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Try **HCII (74E5): sc-69784**, our highly recommended monoclonal alternative to HCII (N-18).