

Goat anti-human Heparin Cofactor II

Affinity-Purified IgG

0.5 mg

Product #: GAHC2-AP

Lot #: XXXX

Expiry date: XXXX

Store at -10 to -20°C

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For Research Use Only.

Not for use in diagnostic procedures.

Description of Heparin Cofactor II

Heparin Cofactor II (HCII), also known as heparin cofactor A and dermatan sulphate cofactor, is a single chain glycoprotein produced in the liver and circulates in plasma at concentration of 50-100 µg/ml (0.8-1.5 µM). A member of the SERPIN family of proteinase inhibitors, HCII exhibits a relatively narrow specificity and is only known to inhibit the serine proteinases thrombin and chymotrypsin. The inhibitory activity toward thrombin is accelerated up to 1000-fold in the presence of optimal concentrations of heparin. Unlike Antithrombin, thrombin inhibition by HCII is also enhanced by dermatan sulphate. HCII has an apparent molecular weight of 65,600 daltons and interaction with thrombin results in a covalent 1:1 enzyme-inhibitor complex of 102,600 daltons¹⁻³.

REFERENCES

1. Tollefsen DM, Majerus DW, Blank MK; Heparin Cofactor II; JBC 257:5, p2162-2169, 1982.
2. Pratt CW, Whinna HC, Mead JB, Treanor RE, Church FC: Physicochemical aspects of Heparin Cofactor II; Ann N.Y. Acad. Sci.: 556, p104-115, 1989.
3. Griffith MJ, Noyes CM, Church FC; Reactive Site Peptide Structural Similarity between Heparin Cofactor II and Antithrombin III; JBC:260, pp 2218-2225, 1985.

Product Specifications

Description:

Vial containing XXXX ml of IgG purified by affinity chromatography on immobilized HCII. Total protein is 0.5 mg.

Format:

Affinity-purified IgG (APIgG), clear liquid.

Host Animal:

Goat

Immunogen:

Human Heparin Cofactor II purified from plasma.

Concentration:

APIgG concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient ($E^{1\%}_{280}$) of 13.4.

Buffer:

10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.

Storage:

Store between -10 and -20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

Specificity:

This antibody is specific for HCII as demonstrated by immunoelectrophoresis and ELISA.

Applications:

Suitable as a source of enriched antibodies to human HCII.

Neutralizing activity:

Not determined

Species Cross Reactivity: (immunodiffusion vs. citrated plasma)

Human:	XXXX	Mouse:	XXXX	Rat:	XXXX
Rabbit:	XXXX	Pig:	XXXX	Dog:	XXXX

Related Products:

Cat #: GAHC2-IG	Goat anti-Heparin Cofactor II, IgG from antiserum
Cat #: GAHC2-APHRP	Goat anti- Heparin Cofactor II, APIgG-peroxidase
Cat. # SAHC2-IG	Sheep anti-HCII, whole IgG from antiserum
Cat #: HCII-EIA	Paired antibody set for ELISA of HCII, 4 x 96 wells
Cat #: THCII-EIA	Paired antibody ELISA of Thrombin-HCII complexes
Cat #: HCII-DP	Human plasma deficient in HCII, immune depleted
Cat #: ATHC-DP	Human ATIII & HCII def plasma, immune depleted
Cat #: HCII-LDP	Lyophilized human plasma deficient in HCII, immune depleted
Cat #: ATHC-LDP	Lyophilized human ATIII & HCII def plasma, immune depleted

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