



**Goat anti-human Heparin Cofactor II**  
Peroxidase Conjugated Affinity-Purified IgG  
0.1 mg

**Product #:** GAHC2-APHRP  
**Lot #:** XXXX  
**Expiry date:** XXXX

Store at -10 to -20°C

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 daltons<sup>1-3</sup>.

### 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 affinity-purified IgG conjugated to horseradish peroxidase (HRP) through carbohydrate groups. Total protein is 0.1 mg.

**Format:**

APIgG-HRP conjugate as a clear, slightly red-brown liquid.

**Host Animal:**

Goat

**Immunogen:**

Human Heparin Cofactor II purified from plasma.

**Concentration:**

APIgG-HRP concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient ( $E^{1\%}_{280}$ ) of 14.

**Buffer:**

A buffered stabilizer solution containing 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. Avoid exposure to sodium azide as it will inhibit peroxidase activity.

**Specificity:**

Prior to conjugation, this antibody was specific for HCII as demonstrated by immunoelectrophoresis and ELISA.

**Applications:**

Suitable as a source of peroxidase-labeled antibodies to HCII.

**Rz Ratio (Reinheitszahl,  $A_{403}/A_{280}$ ):**

XXXX as determined spectrophotometrically.