

**\*\*REPRESENTATIVE DATASHEET\*\***
**Goat anti-human Protein C Inhibitor (PCI)**

Whole IgG from antiserum

10 mg

**Product #:** GAPCI-IG

**Lot #:** XXXX

**Expiry date:** XXXX

Store at -10 to -20°C

 1395 Sandhill Drive. Ancaster, Ontario, Canada L9G 4V5  
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For Research Use Only.

Not for use in diagnostic procedures.

**Description of Protein C Inhibitor (PCI)**

Protein C Inhibitor (PCI), also known as Plasminogen Activator Inhibitor 3 (PAI3), is a member of the SERPIN family of proteinase inhibitors. It is produced in the liver as a single chain glycoprotein (mass of 57 kDa) and circulates in plasma at a concentration of 5 µg/ml (~90 nM). PCI is also found in urine in lower concentrations of 250 ng/mL (~0.4 nM).

PCI is the primary inhibitor of activated Protein C (APC) in plasma but demonstrates a relatively broad specificity, also inhibiting thrombin, FXa, FXIa, kallikrein, tPA, urokinase, prostate specific antigen, acrosin, chymotrypsin and trypsin. The preferred enzyme target for PCI appears to be thrombin and this interaction is increased by more than 100 fold in the presence of thrombomodulin. Like ATIII and HCII, the inhibitory activity of PCI towards some of these enzymes is stimulated by high concentrations of heparin (5 U/ml) which can accelerate the rate of inactivation as much as 50 fold. Enzyme inhibition by PCI occurs through proteolytic cleavage at Arg<sup>354</sup>-Ser<sup>355</sup> and subsequent rapid formation of a stable, inactive 1:1 enzyme-PCI complex. Interaction with APC results in an SDS-stable APC-PCI complex of 102 kDa<sup>1-4</sup>

**References and Reviews**

1. Suzuki K; Protein C Inhibitor; Methods in Enzymology 222, pp 385-399, 1993.
2. Cooper ST, Whinna HC, Jackson TP, Boyd JM, Church FC; Intermolecular Interactions between Protein C Inhibitor and Coagulation Proteases; Biochemistry: 34, pp. 12991-12997, 1995.
3. Heeb MJ, Espana F, Geiger M, Collen D, Stump DC, Griffin JH; Immunological Identity of Heparin-dependent Plasma & Urinary Protein C Inhibitor & Plasminogen Activator Inhibitor-3; JBC:262, pp 15813-15816, 1987.
4. Rezaie AR, Copper ST, Church FC, Esmon CT; Protein C Inhibitor is a Potent Inhibitor of the Thrombin-Thrombomodulin Complex; JBC:270, pp 25336-25339, 1995.

**Product Specifications**
**Description:**

Vial containing XXXX ml of whole IgG representing approximately 1 ml of antiserum. Total protein is 10 mg.

**Format:**

Whole IgG, clear liquid.

**Host Animal:**

Goat

**Immunogen:**

Human Protein C Inhibitor purified from plasma.

**Concentration:**

 IgG concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient (E<sup>1%<sub>280</sub></sup>) 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 Protein C Inhibitor as demonstrated by immunoelectrophoresis and ELISA.

**Applications:**

Suitable as a source of antibodies to human Protein C Inhibitor.

**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 #: **GAPCI-AP** Goat anti-human Protein C Inhibitor, affinity purified IgG  
 Cat #: **GAPCI-HRP** Goat anti-human Protein C Inhibitor, IgG-peroxidase  
 Cat #: **PCI-EIA** Paired antibody set for ELISA of PCI, 5 x 96 wells  
 Cat #: **APCPCI-EIA** Paired antibody ELISA of APC-PCI complex, 5 x 96 wells  
 Cat #: **PCI-DP** Human plasma deficient in PCI, immune depleted  
 Cat #: **PCI-LDP** Lyophilized Human plasma deficient in PCI

 Visit our site ([www.affinitybiologicals.com](http://www.affinitybiologicals.com)) for details.

**Limited Warranty:** This product is warranted to perform in accordance with its labeling and literature. Affinity Biologicals Inc. disclaims any implied warranty of merchantability or fitness for any other purposes, and in no event will Affinity Biologicals Inc. be liable for any consequential damages arising out of aforesaid express warranty.

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