



Goat anti Human Protein C Inhibitor polyclonal antibody [HRP] (CABT-L499)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Prior to conjugation, this antibody was specific for Protein C Inhibitor as demonstrated by immunoelectrophoresis and ELISA.
Target	PCI - Protein C Inhibitor
Immunogen	Human Protein C Inhibitor purified from plasma.
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Conjugate	HRP
Applications	IEP, ELISA
Format	Liquid
Size	200 µg
Buffer	A buffered stabilizer solution containing 50% (v/v) glycerol.
Preservative	None
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 this is an inhibitor of peroxidase activity.

BACKGROUND

Introduction

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, F.XIa, 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 Arg354-Ser355 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.

Keywords

SERPINA5;serpin peptidase inhibitor;clade A (alpha-1 antiproteinase;antitrypsin);member 5;PCI;PAI3;PAI-3;PCI-B;PROCI;PLANH3;plasma serine protease inhibitor;protein C inhibitor;plasminogen activator inhibitor-3;acrosomal serine protease inhibitor;plasminogen activator inhibitor III;serine (or cysteine) proteinase inhibitor;clade A (alpha-1 antiproteinase;antitrypsin);member 5;anti-PCI

GENE INFORMATION

Entrez Gene ID

[5104](#)

UniProt ID

[P05154](#)