

## Sheep anti Human Plasminogen Activator Inhibitor Type 1 polyclonal antibody [HRP] (CABT-L495)

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 PAI-1 as demonstrated by immunoelectrophoresis and ELISA.
Target	PAI-1
Immunogen	Recombinant Plasminogen Activator Inhibitor-1 (PAI-1) prepared from bacterial extracts.
Isotype	IgG
Source/Host	Sheep
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.

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## BACKGROUND

Introduction	Type I plasminogen activator inhibitor, PAI-1, is a 50 kDa single-chain glycoprotein which belongs to the serine protease inhibitor (SERPIN) family of proteins. The concentration of PAI-1 in normal human plasma is very low, with an average concentration of approximately 20 ng/ml. The plasma concentrations of PAI-1 can be affected by a number of factors including diurnal variations, age, sex, pregnancy, obesity and exercise status. PAI-1 is synthesized by various cell types including endothelial cells, hepatocytes, vascular smooth muscle cells, fibroblasts, mesothelial cells, granulosa cells and malignant cell lines. It is also found in the -granules of platelets as well as plasma. PAI-1 exists in at least three different conformations, including an active form with a half-life of approximately 1-3 hours, a latent form and a proteolytically or oxidatively inactivated form. The plasma glycoprotein vitronectin has been shown to bind active PAI-1 and stabilize it in its active conformation, extending its functional half-life to greater than 24 hours. Little specific binding of the latent or inactive forms of PAI-1 to vitronectin occurs. PAI-1 is considered to be the primary regulator of plasminogen activation in vivo. It is the major physiologic inhibitor of both the single chain and two-chain forms of tPA, being able to inhibit the single-chain form at least 10000 times greater than other PAIs.
Keywords	SERPINE1;serpin peptidase inhibitor;clade E (nexin;plasminogen activator inhibitor type 1);member 1;PAI;PAI1;PAI-1;PLANH1;plasminogen activator inhibitor 1;serpin E1;endothelial plasminogen activator inhibitor;serine (or cysteine) proteinase inhibitor;clade E (nexin;plasminogen activator inhibitor type 1);member 1;anti-PAI-1

## **GENE INFORMATION**

Entrez Gene ID	5054
UniProt ID	<u>P05121</u>