



Sheep anti Human Plasminogen Activator Inhibitor Type 1 polyclonal antibody (CABT-L494)

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

PRODUCT INFORMATION

Specificity	This antibody is 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	Unconjugated
Applications	IEP, ELISA
Format	Liquid
Concentration	10 mg/ml
Size	10 mg
Buffer	10 mM HEPES, pH 7.4, 150 mM NaCl, 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.

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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;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	<u>5054</u>

UniProt ID P05121