Serpin E1/PAI-1 Monoclonal Antibody(Detector)

catalog number: AN001470P

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*
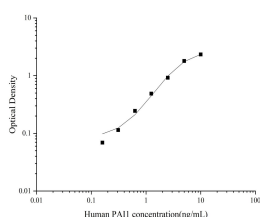
Description

Reactivity	Human
Immunogen	Recombinant Human Serpin E1/PAI-1 Protein expressed by Mammalian
Host	Rat
Isotype	Rat IgGl
Clone	4D7
Purification	Protein A/G Purification
Conjugation	Unconjugated
Buffer	Phosphate buffered solution, pH 7.2, containing 0.05% proclin 300.

Applications	Recommended Dilution
ELISA Detector	0.1-0.4 µg/mL

Data

Sandwich ELISA-Recombinant Human Serpin E1/PAI-1
Protein standard curve.Background subtracted standard curve
using Serpin E1/PAI-1 antibody(AN001460P)
(Capture),Serpin E1/PAI-1 antibody(AN001470P)(Detector)
in sandwich ELISA.The reference range value for
Recombinant Human Serpin E1/PAI-1 Protein is 0.15625-10
ng/mL.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

Background

Plasminogen activator inhibitor 1,also known as PAI-1,Endothelial plasminogen activator inhibitor,SerpinE1 and PlANH 1,is a secreted glycoprotein that belongs to the serpin family. SerpinE1 is the primary physiological inhibitor of the two plasminogen activators urokinase (uPA) and tissue plasminogen activator (tPA). Its rapid interaction with TPA may function as a major control point in the regulation of fibrinolysis. Defects in SerpinE1 are the cause of plasminogen activator inhibitor-1 deficiency (PAI-1 deficiency) which is characterized by abnormal bleeding due to SerpinE1 defect in the plasma. High concentrations of SerpinE1 have been associated with thrombophilia which is an autosomal dominant disorder in which affected individuals are prone to develop serious spontaneous thrombosis. Studies of PAI-1 have contributed significantly to the elucidation of the protease inhibitory mechanism of serpins,which is based on a metastable native state becoming stabilised by insertion of the RCl into the central beta-sheet A and formation of covalent complexes with target proteases. Greater expression of PAI-1 has been associated with increased survival of cells and resistance to apoptosis. PAI-1 appears to influence apoptosis by decreasing cell adhesion (anoikis) as well as its effect on intracellular signaling. PAI-1,in its active state,also binds to the extracellular protein vitronectin. When in complex with its target proteases,it binds with high affinity to endocytosis receptors of the low density receptor family. The mechanisms of PAI-1 overexpression during obesity are complex,and it is conceivable that several inducers are involved at the same time at several sites of synthesis. PAI-1 is also implicated in adipose tissue development. It suggests that PAI-1 inhibitors serve in the control of atherothrombosis.