

Recombinant Protein Technical Manual Recombinant Human SerpinE1/PAI Protein (His Tag) RPES4698

Product Data:

Product SKU: RPES4698	<b>Size:</b> 10µg
Species: Human	Expression host: Human Cells

**Uniprot:** P05121

## **Protein Information:**

Molecular Mass:	43.8 kDa
AP Molecular Mass:	48 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from a 0.2 $\mu m$ filtered solution of 20mM HAc-NaAc, 150mM NaCl, pH 4.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Plasminogen Activator Inhibitor 1; PAI; PAI; Endothelial Plasminogen Activator Inhibitor; Serpin E1; SERPINE1; PAI1; PLANH1;SERPINE1

## Sequence: Val24-Pro402

## Background:

Serpins are a group of proteins with similar structures that were first identified as a set of proteins able to inhibit proteases. They are the largest and most diverse family of serine protease inhibitors which are involved in a number of fundamental biological processes such as blood coagulation, complement activation, fibrinolysis, angiogenesis, inflammation and tumor suppression and are expressed in a cell-specific manner. Serpin E1 is a secreted protein which belongs to the Serpin family. Serpin E1 acts as 'bait' for tissue plasminogen activator, urokinase, and protein C. Its rapid interaction with TPA may function as a major control point in the regulation of fibrinolysis. Defects in SERPINE1 are characterized by abnormal bleeding due to Serpin E1 defect in the plasma. High concentrations of Serpin E1 have been associated with thrombophilia which is an autosomal dominant disorder in which affected individuals are prone to develop serious spontaneous thrombosis.