

Rabbit Monoclonal Antibody to Human PAI-1 / SerpinE1



Catalog Number: 10296-R004

General Information	
Immunogen:	Recombinant Human PAI-1 / SerpinE1 Protein (Catalog # 10296-H08H)
Clone ID:	004
Ig Type:	Rabbit IgG
Applications:	WB, ELISA
Specificity:	Human PAI-1 / SerpinE1
Formulation:	0.2 µm filtered solution in PBS with 5% trehalose
Storage:	< -20° C

Preparation

This antibody was obtained from a rabbit immunized with purified, human cell-derived, recombinant Human PAI-1 / SerpinE1 (rh PAI-1 / SerpinE1; [Catalog # 10296-H08H](#); NP_000593.1; Met 1 - Pro 402).

Applications

Western blot – This antibody can be used at 1-2 µg/mL with the appropriate secondary reagents to detect Human SERPINE1 in WB. Using a DAB detection system, the detection limit for Human SERPINE1 is approximately 0.5 ng/lane under non-reducing conditions and reducing conditions.

Direct ELISA – This antibody can be used at 0.1-0.2 µg/mL with the appropriate secondary reagents to detect Human SERPINE1. The detection limit for Human SERPINE1 is approximately 0.00975 ng/well.

Specificity

Human PAI-1 / SerpinE1

Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -70°C. **Preservative-Free.**

Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

Background

Serpins 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. Serpins are a group of proteins with similar structures that were first identified as a set of proteins able to inhibit proteases. The acronym serpin was originally coined because many serpins inhibit chymotrypsin-like serine proteases (serine protease inhibitors). Over 1000 serpins have been identified.

Plasminogen activator inhibitor 1, also known as PAI-1, Endothelial plasminogen activator inhibitor, SERPINE1 and PLANH1, is a secreted protein which belongs to the serpin family. SERPINE1 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 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

Reference

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3. Forsyth, S. et al., 2003, Genomics 81: 336-45.
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