

## **PAI-1 Polyclonal Antibody**

Catalog Number: E91297 Amount: 100ul

> Background: PAI-1 is a secreted protein that belongs to the serine proteinase inhibitor (serpin)

> > superfamily. It inhibits urokinase and tissue plasminogen activators (uPA and tPA) and thus, reduces the conversion of inactive plasminogen to plasmin (1). PAI-1 regulates fibrinolysis and plays an important role in vessel patency and tissue remodeling. Secreted PAI-1 interacts with the extracellular matrix (ECM) component vitronectin, thereby modulating cell-ECM interactions (2,3). PAI-1 is expressed in a variety of tissues with higher expression in liver, vascular endothelial cells, platelets, macrophages, and adipose tissue (1). Increased levels of PAI-1 are associated with deep vein thrombosis (4). Defects in PAI-1 cause plasminogen activator inhibitor-1 deficiency (PAI-1D), which is characterized by increased bleeding after injury or surgery (5). Research studies have shown that high levels of PAI-1 are associated with obesity, aging, insulin resistance, and type 2 diabetes (6-8). PAI-1 is transcriptionally regulated by TGF-β and mediates TGF-β-induced inhibition of cell migration and invasion in cancer cells (9). Studies have shown PAI-1 to be also involved in fibrosis (10).

Species: Rabbit IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,

50% glycerol, pH7.3.

Synonyms: SERPINE1;PAI;PAI-1;PAI1;PLANH1; Plasminogen inhibitor1;Endothelial activator

plasminogen activator inhibitor; Serpin E1;

Immunogen: A synthetic peptideof human PAI-1

Purification: Affinity purification

Reactivity: н м Applications: WB IP Molecular Weight: 50kDa Swiss-Prot No.: P05121 5054 Gene ID:

Isotype:

References:

1. Pannekoek, H. et al. (1986) EMBO J 5, 2539-44. 2. Sigurdardottir, O. and Wiman, B. (1994) BiochimBiophysActa 1208, 104-10. 3. Konstantinides, S. et al. (2001) Circulation 103, 576-83. 4. Baldwin, J.F. et al. (2012) J VascSurg 56, 1089-97. 5. Fay, W.P. et al. (1997) Blood 90, 204-8. 6. Pannacciulli, N. et al. (2002) Obes Res 10, 717-25. 7. Juhan-Vague, I. et al. (1991) Diabetologia 34, 457-62. 8. Hashimoto, Y. et al. (1987) Thromb Res 46, 625-33. 9. Humbert, L. and Lebrun, J.J. (2012) Cell Signal, . 10. Zhang, L.P. et al. (1999) J Hepatol 31,

703-11.

WB 1:500 - 1:2000 IP 1:20- 1:50

Western blot analysis of extracts of variouscell lines, using PAI-1 antibody.