

DESCRIPTION

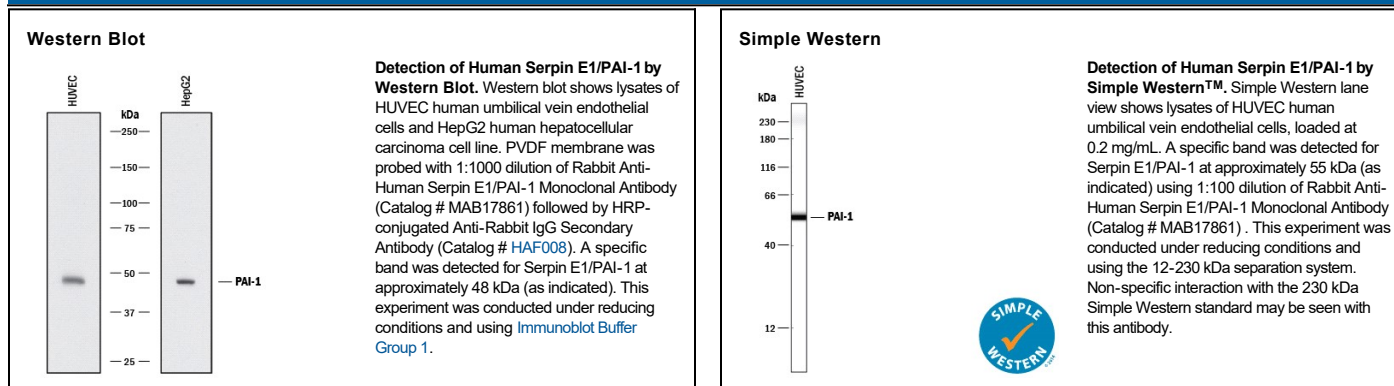
Species Reactivity	Human
Specificity	Detects human Serpin E1/PAI-1 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 1121C
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Serpin E1/PAI-1 Met1-Pro402 Accession # NP_000593
Formulation	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1:1000 dilution	See Below
Simple Western	1:100 dilution	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C, as supplied. ● 1 month, 2 to 8 °C under sterile conditions after opening. ● 6 months, -20 to -70 °C under sterile conditions after opening.

BACKGROUND

As a member of the Serpin superfamily of serine protease inhibitors, Serpin E1/PAI-1 is the principal inhibitor of urokinase-type plasminogen activator (uPA) and tissue-type PA (1, 2). As important regulators of extracellular matrix remodeling, uPA and PAI-1 play a major role in many processes such as angiogenesis, tumor invasion and obesity (2-4). For example, uPA and PAI-1 are the only tumor prognostic factors validated at the highest level of evidence with regard to their clinical utility in breast cancer (5). The human PAI-1 is initially synthesized as 402 amino acid precursor with a N-terminal signal peptide (6, 7). PAI-1 may exist in one of two possible conformations, designated as active or latent (8). The purified rhPAI-1 is active against rhuPA. The heterogeneity at the N-terminus of the purified recombinant human PAI-1 has been observed before for both the recombinant and native proteins (9).

References:

1. Silverman, G.A. *et al.* (2001) *J. Biol. Chem.* **276**:33293.
2. Stefansson, S. *et al.* (2003) *Curr. Pharm. Des.* **9**:1545.
3. Duffy, M.J. (2002) *Clin. Chem.* **48**:1194.
4. Juhan-Vague, I. *et al.* (2003) *J. Thromb. Haemost.* **1**:1575.
5. Harbeck, N. *et al.* (2002) *Clin. Breast Cancer* **3**:196.
6. Pannekoek, H. *et al.* (1986) *EMBO J.* **5**:2539.
7. Ginsburg, D. *et al.* (1986) *J. Clin. Invest.* **78**:1673.
8. Wang, Z. *et al.* (1996) *Biochemistry* **35**:16443.
9. Stromqvist, M. *et al.* (1994) *Protein Expr. Purif.* **5**:309.

PRODUCT SPECIFIC NOTICES

* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.