

DESCRIPTION

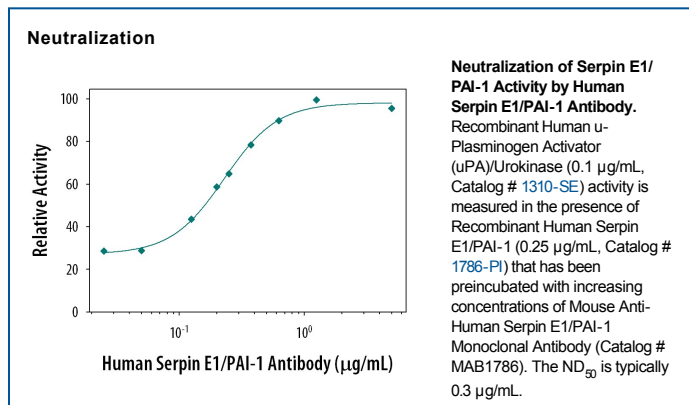
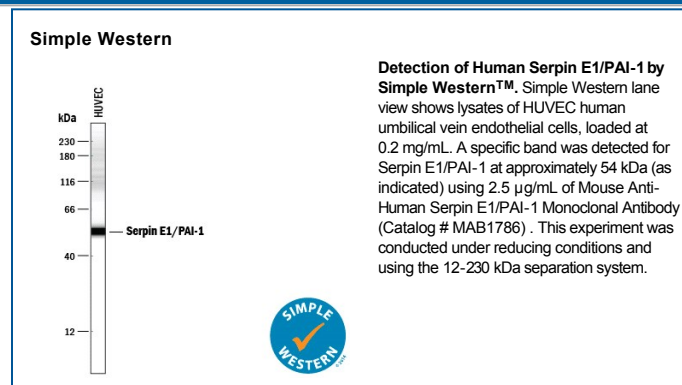
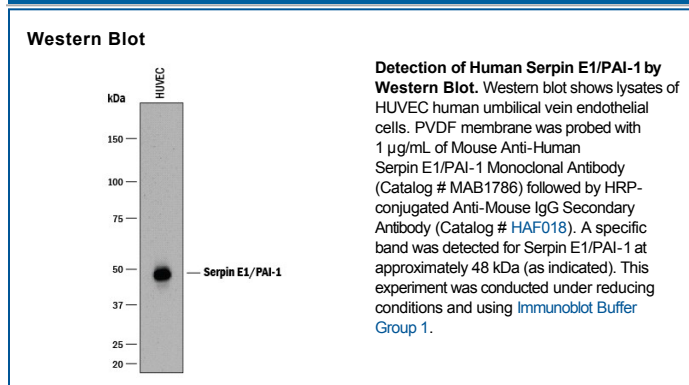
Species Reactivity	Human
Specificity	Detects human Serpin E1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human Serpin A1, A3, A4, A8, C1, F1, F2, I1, I2, recombinant mouse Serpin D1 or E2 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 242816
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Serpin E1/PAI-1 Met1-Pro402 Accession # P05121
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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 µg/mL	See Below
Simple Western	2.5 µg/mL	See Below
Human Serpin E1/PAI-1 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human Serpin E1/PAI-1 Antibody (Catalog # MAB1786)
ELISA Detection Standard	0.1-0.4 µg/mL	Human Serpin E1/PAI-1 Biotinylated Antibody (Catalog # BAF1786) Recombinant Human Serpin E1/PAI-1 (Catalog # 1786-PI)
Neutralization	Measured by its ability to neutralize Recombinant Human Serpin E1/PAI-1 (0.25 µg/mL, Catalog # 1786-PI) inhibition of Recombinant Human u-Plasminogen Activator (uPA)/Urokinase (0.1 µg/mL, Catalog # 1310-SE) cleavage of the fluorogenic peptide substrate Z-GGR-AMC (100 µM). The Neutralization Dose (ND ₅₀) is typically 0.3 µg/mL.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. 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 reconstitution.● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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:

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4. Juhan-Vague, I. *et al.* (2003) *J. Thromb. Haemost.* **1**:1575.
5. Harbeck, N. *et al.* (2002) *Clin. Breast Cancer* **3**:196.
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9. Stromqvist, M. *et al.* (1994) *Protein Expr. Purif.* **5**:309.