

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	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. 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	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA

Western Blot

Detection of Human Serpin E1/PAI-1 by Western Blot. Western blot shows lysates of HUVEC human umbilical vein endothelial cells and HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 0.5 µg/mL of Rabbit Anti-Human Serpin E1/PAI-1 Monoclonal Antibody (Catalog # MAB17861) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Serpin E1/PAI-1 at approximately 48 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western

Detection of Human Serpin E1/PAI-1 by Simple Western™. Simple Western lane view shows lysates of HUVEC human umbilical vein endothelial cells, loaded at 0.2 mg/mL. A specific band was detected for Serpin E1/PAI-1 at approximately 55 kDa (as indicated) using 5 µg/mL of Rabbit Anti-Human Serpin E1/PAI-1 Monoclonal Antibody (Catalog # MAB17861). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.

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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