

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Serpin D1/Heparin Cofactor II in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human Serpin A3, A4, B6, B8, C1, I1, I2, recombinant mouse Serpin A1, A6, D1, E1, E2, F1, or F2 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 373008
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 D1/Heparin Cofactor II Gly20-Arg498 Accession # P05546
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	1 µg/mL	Recombinant Human Serpin D1/Heparin Cofactor II (Catalog # 3198-PI)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Serpin D1/Heparin Cofactor II (Catalog # 3198-PI), see our available Western blot detection antibodies

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

Serpin D1, also known as Heparin Cofactor II, is a member of the Serpin superfamily of the serine protease inhibitors (1). Similar to Serpins A5 and C1, it inhibits thrombin and this activity is enhanced by heparin. Interestingly, a C-terminal His-tagged recombinant Serpin D1 had enhanced heparin effect, which was maintained in a plasma-based thrombin inhibition assay (2). Congenital Serpin D1 deficiency is a potential risk factor for thrombosis (3).

References:

1. Silverman, G.A. *et al.* (2001) *J. Biol. Chem.* **276**:33293.
2. Bauman, S.J. *et al.* (1999) *J. Biol. Chem.* **274**:34556.
3. Tollefsen, D.M. (2002) *Arch. Pathol. Lab. Med.* **126**:1394.