

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Serpin F2/ α_2 -Antiplasmin in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant mouse (rm) Serpin F2 is observed and less than 1% cross-reactivity with recombinant human (rh) Serpin A1, rhSerpin A3, rhSerpin A4, rhSerpin A5, rmSerpin C1, and rmSerpin D1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Serpin F2/ α_2 -Antiplasmin Met28-Lys491 Accession # P08697
Formulation	Lyophilized from a 0.2 μ m 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 μ m 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	0.1 μ g/mL	Recombinant Human Serpin F2/ α_2 -Antiplasmin (Catalog # 1470-PI)
Immunoprecipitation	25 μ g/mL	Conditioned cell culture medium spiked with Recombinant Human Serpin F2/ α_2 -Antiplasmin (Catalog # 1470-PI), see our available Western blot detection antibodies
Neutralization	Measured by its ability to neutralize Recombinant Human Serpin F2 (0.24 μ g/mL, Catalog # 1470-PI) inhibition of Trypsin (0.05 μ g/mL) cleavage of the fluorogenic peptide substrate Mca-RPKPVE-Nval-WRK(Dnp)-NH ₂ (10 μ M, Catalog # ES002). The Neutralization Dose (ND ₅₀) is typically 4.2 μ g/mL.	

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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 F2 is a member of the Serpin superfamily and the primary physiological inhibitor of the serine protease plasmin, which is responsible for the dissolution of fibrin clots (1, 2). In addition to plasmin, Serpin F2 is also an efficient inhibitor of trypsin and chymotrypsin (3). Liver and kidney are major sites of Serpin F2 production and other tissues such as muscle, intestine, central nervous system, and placenta also express its mRNA at a moderate level. The tissue expression pattern of Serpin F2 indicates that it is a key regulator of plasmin-mediated proteolysis in these tissues (4). Human Serpin F2 is synthesized as a 491 amino acid precursor with a 27 amino acid signal peptide. The secreted protein has a short propeptide (residues 28-39) and a mature chain (residues 40-491). The presence of the propeptide did not affect its ability to inhibit plasmin but reduced its cross-linking ability to fibrin (5).

References:

1. Tone, M. *et al.* (1987) J. Biochem. **102**:1033.
2. Silverman, G.A. *et al.* (2001) J. Biol. Chem. **276**:33293.
3. Potempa, J. *et al.* (1988) Science **241**:699.
4. Menoud, P.-A. *et al.* (1996) J. Clin. Invest. **97**:2478.
5. Sumi, Y. *et al.* (1989) J. Biochem. **106**:703.