

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Serpin C1/Antithrombin-III in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 2% cross-reactivity with recombinant human (rh) rhSerpins A1, rhSerpins A3, rhSerpins A4, rhSerpins A5, rhSerpins F2, recombinant mouse Serpin D1 and rhPEDF is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Serpin C1/Antithrombin-III His33-Lys464 Accession # P01008
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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 µg/mL	Recombinant Human Serpin C1/Antithrombin-III (Catalog # 1267-PI)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Serpin C1/Antithrombin-III (Catalog # 1267-PI), see our available Western blot detection antibodies
Neutralization	Measured by its ability to neutralize Recombinant Human Serpin C1 (0.8 µg/mL, Catalog # 1267-PI) inhibition of Recombinant Human Coagulation Factor II/Thrombin (0.05 µg/mL, Catalog # 1473-SE) cleavage of the fluorogenic peptide substrate Boc-VPR-AMC (100 µM, Catalog # ES011). The Neutralization Dose (ND ₅₀) is typically 4.6 µg/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.
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 C1 is a member of the Serpin superfamily of the serine protease inhibitors (1). It is the principal plasma Serpin of blood clotting proteases and inhibits thrombin as well as several factors such as Xa (2). Similar to Serpins A5 and D1, its thrombin inhibitory activity is enhanced by heparin. Hereditary and acquired Serpin C1 deficiency is the cause of an increased thrombotic tendency in many cases (3). For example, acquired Serpin C1 deficiency is a common condition in sepsis, after major trauma or surgery (4).

References:

1. Silverman, G.A. *et al.* (2001) J. Biol. Chem. **276**:33293.
2. Chuang, Y.-J. *et al.* (2001) Biochemistry **40**:6670.
3. Vinazzer, H. (1999) Semin. Thromb. Hemost. **25**:257.
4. Risberg, B. (1998) Blood Coagul. Fibrinolysis Suppl. **3**:S3.