

DESCRIPTION

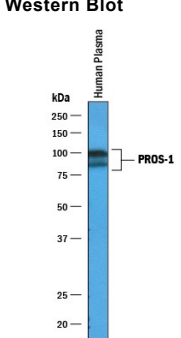
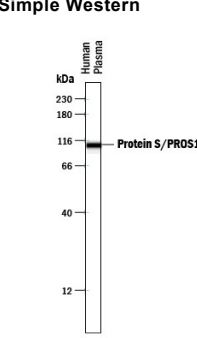

Species Reactivity	Human
Specificity	Detects human PROS1 in direct ELISAs and Western blots. In these formats, approximately 20% cross-reactivity with recombinant mouse Protein S is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Protein S Ala42-Trp670 Accession # P07225
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	0.2 µg/mL	See Below
Simple Western	2 µg/mL	See Below

DATA

Western Blot	Simple Western
 <p>Detection of Human Protein S/PROS1 by Western Blot. Western blot shows human plasma. PVDF membrane was probed with 0.2 µg/mL of Goat Anti-Human Protein S/PROS1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4036) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). Specific bands were detected for Protein S/PROS1 at approximately 80 & 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	 <p>Detection of Human Protein S/PROS1 by Simple Western™. Simple Western lane view shows human plasma, loaded at 0.2 mg/mL. A specific band was detected for Protein S/PROS1 at approximately 106 kDa (as indicated) using 2 µg/mL of Goat Anti-Human Protein S/PROS1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4036) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p> 

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

Protein S is a 69 kDa, secreted glycoprotein that belongs to a general group of vitamin K-dependent proteins. It is synthesized principally by hepatocytes, circulates both free (40%) and bound to C4bBP (60%), interacts with protein C to suppress coagulation, and binds TAM family RTKs during immune regulation. Mature human Protein S is 634 amino acids (aa) in length. It contains one Gla domain (aa 42 - 87), four EGF-like repeats (aa 117 - 283) and two laminin G-like domains (aa 299 - 666). Over aa 42 - 670, human Protein S shares 83%, 80%, and 79% aa sequence identity with porcine, mouse, and canine Protein S, respectively.