

DESCRIPTION

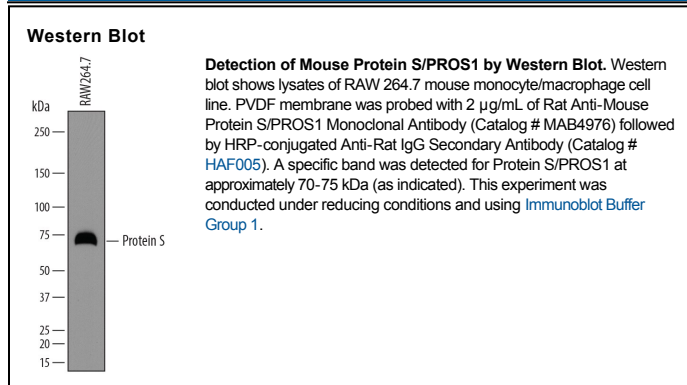
Species Reactivity	Mouse
Specificity	Detects mouse Protein S/PROS1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Protein S is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 818002
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Protein S/PROS1 Met1-Arg669 Accession # Q08761
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	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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 (PROS1) is a 70-75 kDa plasma glycoprotein member of the vitamin K dependent family of proteins. It is synthesized by hepatocytes, Sertoli cells, macrophages, vascular smooth muscle cells and endothelium. Protein S is a non-enzymatic cofactor for activated protein C and participates in the degradation of coagulation factors FVa and FVIIIa. It also binds to Axl on smooth muscle, likely initiating mitosis. Protein S circulates free in plasma and, unlike Protein S in human and rat, does not complex with C4BP. Mouse Protein S precursor is 675 amino acids (aa) in length. It contains a signal sequence (aa 1-24), a cleavable prosegment (aa 25-41) and a 634 aa mature region. The mature molecule contains one Gla region (aa 42-87), four EGF-like domains (aa 117-283) and two laminin G-like regions (aa 299-665). Over aa 1-169 of the mature molecule, mouse Protein S shares 80% and 88% aa identity with human and rat Protein S, respectively.