

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
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

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