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Protein S Rabbit pAb

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Catalog # AP59278

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P07225
Reactivity	Rat, Mouse
Predicted	Human, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	75123
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Protein S/PROS
Epitope Specificity	221-320/676
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted
DISEASE	Defects in PROS1 are the cause of thrombophilia due to protein S deficiency, autosomal dominant (THPH5) [MIM:612336]. A hemostatic disorder characterized by impaired regulation of blood coagulation and a tendency to recurrent venous thrombosis. However, many adults with heterozygous disease may be asymptomatic. Based on the plasma levels of total and free PROS1 antigen as well as the serine protease-activated protein C cofactor activity, three types of PROS1D have been described: type I, characterized by reduced total and free PROS1 antigen levels together with reduced anticoagulant activity; type III, in which only free PROS1 antigen and PROS1 activity levels are reduced; and the rare type II which is characterized by normal concentrations of both total and free PROS1 antigen, but low cofactor activity. Defects in PROS1 are the cause of thrombophilia due to protein S deficiency, autosomal recessive (THPH6) [MIM:614514]. A very rare and severe hematologic disorder resulting in thrombosis and secondary hemorrhage usually beginning in early infancy. Some affected individuals develop neonatal purpura fulminans, multifocal thrombosis, or intracranial hemorrhage.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Protein S (PROS) is a vitamin K-dependent plasma protein that inhibits blood clotting by serving as a cofactor for activated protein C (APC) and facilitates clearance of early apoptotic cells. In the plasma, circulating Protein S becomes inactive upon complexing with C4b-binding protein (C4BP); 60-70% of Protein S circulates in complex with C4BP. Calcium-dependent association of C4BP-Protein S with apoptotic cells influences the regulation of complement activation. Protein S has APC-independent anticoagulant activity through direct inhibition of prothrombin activation via interactions with Factor X A, Factor V A and phospholipids. Autosomal dominant Protein S deficiency (levels 15 to 37% of normal) correlates with severe recurrent

venous thrombosis.

Additional Information

Gene ID	5627
Other Names	Vitamin K-dependent protein S, PROS1, PROS
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

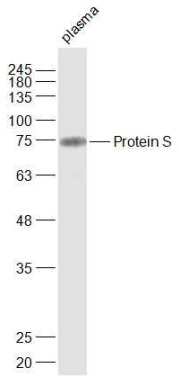
Protein Information

Name	PROS1
Synonyms	PROS
Function	Anticoagulant plasma protein; it is a cofactor to activated protein C in the degradation of coagulation factors Va and VIIIa. It helps to prevent coagulation and stimulating fibrinolysis.
Cellular Location	Secreted.
Tissue Location	Plasma.

Background

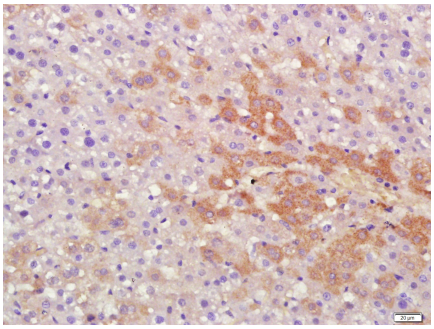
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Images



Sample:
Plasma (Mouse) Lysate at 40 ug
Primary: Anti-Protein S (AP59278) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 71 kD
Observed band size: 75 kD

Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Protein S) Polyclonal Antibody,



Unconjugated (AP59278) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.