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Protein C tag Rabbit pAb

Catalog # AP96608

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Physical State	Liquid
Immunogen	Protein C epitope tag peptide CEDQVDPRLIDGK conjugated to KLH
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase S1 family. Contains 2 EGF-like domains. Contains 1 Gla (gamma-carboxy-glutamate) domain. Contains 1 peptidase S1 domain.
SUBUNIT	Synthesized as a single chain precursor, which is cleaved into a light chain and a heavy chain held together by a disulfide bond. The enzyme is then activated by thrombin, which cleaves a tetradecapeptide from the amino end of the heavy chain; this reaction, which occurs at the surface of endothelial cells, is strongly promoted by thrombomodulin.
Post-translational modifications	The vitamin K-dependent, enzymatic carboxylation of some Glu residues allows the modified protein to bind calcium. N- and O-glycosylated. Partial (70%) N-glycosylation of Asn-371 with an atypical N-X-C site produces a higher molecular weight form referred to as alpha. The lower molecular weight form, not N-glycosylated at Asn-371, is beta. O-glycosylated with core 1 or possibly core 8 glycans. The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains. May be phosphorylated on a Ser or Thr in a region (AA 25-30) of the propeptide.
DISEASE	Defects in PROC are the cause of thrombophilia due to protein C deficiency, autosomal dominant (THPH3) [MIM:176860]. 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. Individuals with decreased amounts of protein C are classically referred to as having type I protein C deficiency and those with normal amounts of a functionally defective protein as having type II deficiency. Defects in PROC are the cause of thrombophilia due to protein C deficiency, autosomal recessive (THPH4) [MIM:612304]. A hemostatic disorder characterized by impaired regulation of blood coagulation and a tendency to recurrent venous thrombosis. It results in a thrombotic condition that can manifest as a severe neonatal disorder or as a milder disorder with late-onset thrombophilia. The severe form leads to neonatal death through massive neonatal venous thrombosis. Often associated with ecchymotic skin lesions which can turn necrotic called purpura fulminans, this disorder is very rare.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Protein C is a Vitamin K-dependent plasma zymogen that is activated by proteolytic cleavage of the thrombin-thrombomodulin complex to form an anticoagulant enzyme.Protein C Tag is a 12 amino acid sequence EDQVDPRLIDGK, which encodes residues 6 through 17 of the heavy chain of

the protein.Protein C Tag Antibody is a useful tool in analysis of Protein C fusion proteins.

Additional Information

Other Names	APC; PC; PROC1; THPH3; THPH4; PROC_HUMAN; PROC; Anticoagulant protein C; Autoprothrombin IIA; Blood coagulation factor XIV; 3.4.21.69; protein C, inactivator of coagulation factors Va and VIIIa; protein C (inactivator of coagulation factors Va and VIIIa); prepro-protein C; coagulation factor XIV
Dilution	WB=1:500-2000,ELISA=1:1000-5000,IHC-P=1:200-1000,IHC-F=1:200-1000,IF=1:200-1000,ICC/IF=1:100-500,Flow-Cyt=1ug/Test
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.
Name	Protein C tag Rabbit pAb
Function	Protein C is a vitamin K-dependent serine protease that regulates blood coagulation by inactivating factors Va and VIIIa in the presence of calcium ions and phospholipids.

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