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Anti-Protein C Antibody

Catalog # ABO10995

Product Information

Application	WB, IHC-P
Primary Accession	P04070
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Vitamin K-dependent protein C(PROC) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5624
Other Names	Vitamin K-dependent protein C, 3.4.21.69, Anticoagulant protein C, Autoprothrombin IIA, Blood coagulation factor XIV, Vitamin K-dependent protein C light chain, Vitamin K-dependent protein C heavy chain, Activation peptide, PROC
Calculated MW	52071
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted .
Tissue Specificity	Plasma; synthesized in the liver.
Source	Eukaryota
Protein Name	Vitamin K-dependent protein C
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Protein C(446-461aa HGHIRDKEAPQKSWAP).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the peptidase S1 family.

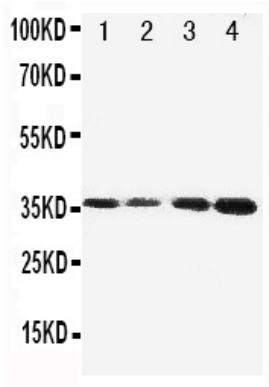
Protein Information

Name	PROC
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 (PubMed:25618265, PubMed:39880037). Exerts a protective effect on the endothelial cell barrier function (PubMed:25651845).
Cellular Location	Secreted. Golgi apparatus Endoplasmic reticulum
Tissue Location	Plasma; synthesized in the liver.

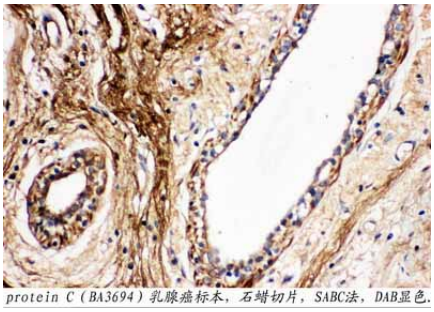
Background

Protein C(PROC), also called PC, is a zymogenic(inactive) protein, the activated form of which plays an important role in regulating blood clotting, inflammation, cell death and maintaining the permeability of blood vessel walls in humans and other animals. The PROC gene is mapped on 2q14.3. The PROC gene contains 8 exons and spans about 11 kb by Foster et al. The conversion of protein C to a protease with anticoagulant function by thrombin requires as a cofactor thrombomodulin, an endothelial cell membrane protein. Riewald et al. demonstrated that activated protein C uses the endothelial cell protein C receptor as a coreceptor for cleavage of protease-activated receptor-1 on endothelial cells. Faust et al. demonstrated that the endothelial pathways required for protein C activation are impaired in severe meningococcal sepsis. They stated that improvement in the outcome of children with meningococcal sepsis who were treated with unactivated protein C concentrates had been described in case reports and in 1 uncontrolled series.

Images



Anti-Protein C antibody, ABO10995, Western blottingLane 1: JURKAT Cell Lysate Lane 2: CEM Cell LysateLane 3: SMMC Cell LysateLane 4: HELA Cell Lysate



Anti-Protein C antibody, ABO10995, IHC(P)IHC(P): Human Mammary Cancer Tissue

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