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PROC Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13543c

Product Information

Application	IF, IHC-P, WB, E
Primary Accession	P04070
Other Accession	NP_000303.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33669
Calculated MW	52071
Antigen Region	177-206

Additional Information

Gene ID	5624
Other Names	Vitamin K-dependent protein C, 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
Target/Specificity	This PROC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 177-206 amino acids from the Central region of human PROC.
Dilution	IF~~1:10~50 IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PROC Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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). 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.

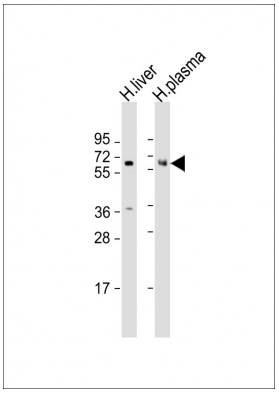
Background

This gene encodes a vitamin K-dependent plasma glycoprotein. The encoded protein is cleaved to its activated form by the thrombin-thrombomodulin complex. This activated form contains a serine protease domain and functions in degradation of the activated forms of coagulation factors V and VIII. Mutations in this gene have been associated with thrombophilia due to protein C deficiency, neonatal purpura fulminans, and recurrent venous thrombosis.

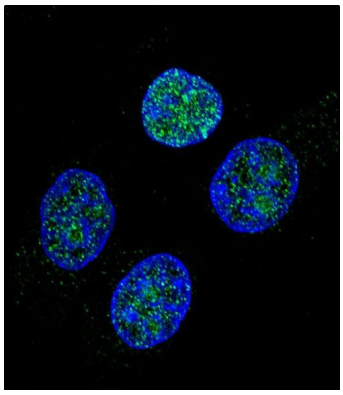
References

Tang, W., et al. Blood (2010) In press :
Agapkina, Iu.V., et al. Mol. Biol. (Mosk.) 44(4):613-619(2010)
Witt, I., et al. Blood Coagul. Fibrinolysis 5(4):651-653(1994)
Zhang, L., et al. Blood 80(4):942-952(1992)
Grundy, C.B., et al. Hum. Genet. 89(6):683-684(1992)

Images

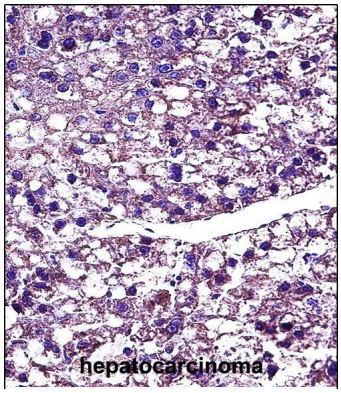


All lanes : Anti-PROC Antibody (Center) at 1:500-1:1000 dilution Lane 1: human liver lysate Lane 2: human plasma lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Confocal immunofluorescent analysis of PROC Antibody (Center) (Cat#AP13543c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

PROC Antibody (Center) (Cat. #AP13543c)immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary



antibody and DAB staining.This data demonstrates the use of PROC Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.