

**PROC Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13543c**

**Specification**

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**PROC Antibody (Center) - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">P04070</a>
Other Accession	<a href="#">NP_000303.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52071
Antigen Region	177-206

**PROC Antibody (Center) - 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  
WB~~1:500-1:1000  
IHC-P~~1:10~50

**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.

**PROC Antibody (Center) - 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

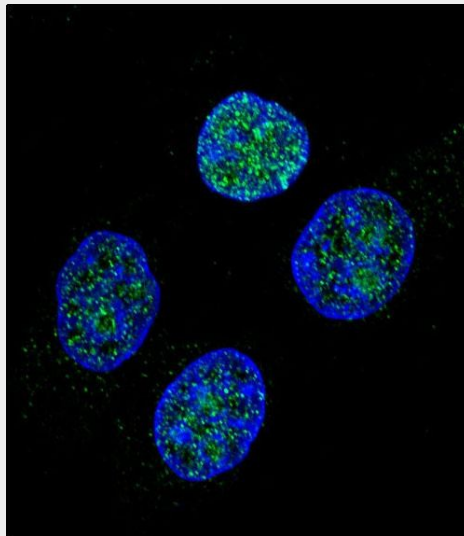
**Tissue Location**

Plasma; synthesized in the liver.

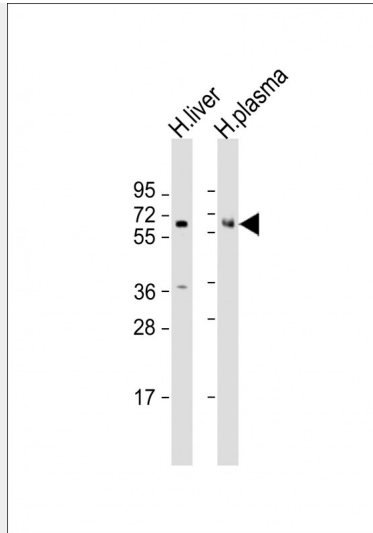
**PROC Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

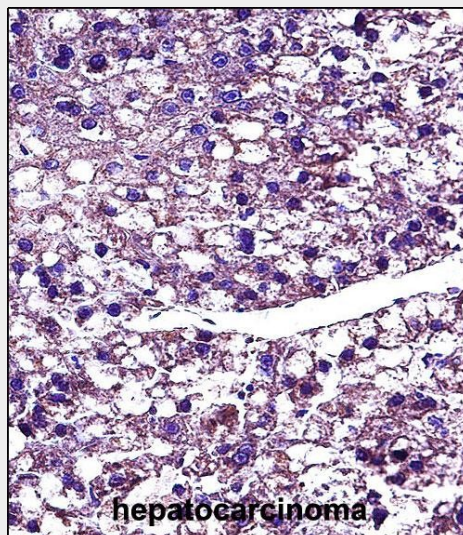
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PROC Antibody (Center) - Images**

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



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% NFD/MTBST.



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.

### PROC Antibody (Center) - 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.

### PROC Antibody (Center) - 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)