

Protein C (AMPC-9071): sc-73466

BACKGROUND

Protein C is a vitamin K-dependent plasma protein that is produced in the liver and made up of two polypeptide chains. It is an important anti-coagulant activated by Thrombin bound to an endothelial surface receptor and it enzymatically cleaves activated forms of Factors V and VIII, thus inhibiting blood coagulation. Protein C is similar to the prothrombin group of blood coagulation factors in its primary structure. Normal Protein C concentration in human plasma is approximately 1-3 ng/ml and the proenzyme concentration is approximately 3 µg/ml. Protein C deficiency is associated with inherited thrombophilia, a rare genetic disorder that predisposes affected individuals to venous thrombosis and habitual abortion.

REFERENCES

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5. Dahlbäck, B. 1995. Inherited thrombophilia: resistance to activated Protein C as a pathogenic factor of venous thromboembolism. *Blood* 85: 607-614.
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7. Abu-Amero, K.K., Owaidah, T.M. and Al-Mahed, M. 2006. Severe type I Protein C deficiency with neonatal purpura fulminans due to a novel homozygous mutation in exon 6 of the Protein C gene. *J. Thromb. Haemost.* 4: 1152-1153.
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9. Esmon, C.T. 2006. Inflammation and the activated Protein C anticoagulant pathway. *Semin. Thromb. Hemost.* 1: 49-60.

CHROMOSOMAL LOCATION

Genetic locus: Proc (mouse) mapping to 18 B1.

SOURCE

Protein C (AMPC-9071) is a rat monoclonal antibody raised against Protein C of mouse origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Protein C (AMPC-9071) is recommended for detection of Protein C of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for Protein C siRNA (m): sc-72140, Protein C shRNA Plasmid (m): sc-72140-SH and Protein C shRNA (m) Lentiviral Particles: sc-72140-V.

Molecular Weight of Protein C: 52 kDa.

SELECT PRODUCT CITATIONS

1. Starr, M.E., Takahashi, H., Okamura, D., Zwischenberger, B.A., Mrazek, A.A., Ueda, J., Stromberg, A.J., Evers, B.M., Esmon, C.T. and Saito, H. 2015. Increased coagulation and suppressed generation of activated Protein C in aged mice during intra-abdominal sepsis. *Am. J. Physiol. Heart Circ. Physiol.* 308: H83-H91.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.