Murine anti-human Protein C (PC)
Monoclonal IgG from ascites
0.5 mg

Product #: MAPC-IG
Lot #: XXXX
Expiry date: XXXX

Store at –10 to -20°C

Description of Protein C (PC)
Protein C (PC) is a vitamin K-dependent glycoprotein produced in the liver. The concentration of PC in plasma is ~4 µg/ml (~60 nM). A deficiency of Protein C (quantitative or qualitative) is a risk factor for vascular thrombosis. Protein C is expressed as a two-chain molecule with a molecular weight of 62 kDa. The light chain (21 kDa) of PC consists of two EGF-like domains and an amino-terminal domain containing one hydroxysaspartic acid and 11 γ-carboxyglutamatic acid (glu) residues. These residues allow PC to bind to membranes that contain acidic phospholipids in a calcium dependent manner. The heavy chain of PC (41 kDa) consists of the catalytic domain and an activation peptide. Activation of Protein C results from cleavage at residue Arg159 in the heavy chain by a complex of thrombin and a cell surface cofactor thrombomodulin. The activation of PC is associated with the release of a small activation peptide (2-3 kDa, called Protein C peptide, or PCP) from the N-terminal of the heavy chain. Activated Protein C (APC) is a serine protease with anticoagulant activity. APC, in complex with a phospholipid membrane, calcium and the Protein S cofactor, exhibits anticoagulant activity through the proteolytic inactivation of coagulation cofactors Va and VIIIa. The primary inhibitor of APC activity in plasma is Protein C Inhibitor (PCI, also called Plasminogen Activator Inhibitor-3, PAI-3) and to a lesser extent by antitrypsin and α1-antitrypsin.

Immunogen:
Human Protein C purified from plasma.

Concentration:
IgG concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient (E1%280) of 13.4.

Buffer:
10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.

Storage:
Store between −10 and −20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

Specificity:
This antibody is specific for Protein C as demonstrated by ELISA.

Applications:
Suitable as a source of antibodies to human Protein C.

Neutralizing activity:
Not determined.

Species Cross Reactivity:
Not determined.

Related Products:
- Cat #: GAPC-IG Goat anti-human Protein C, IgG from antiserum
- Cat #: GAPC-AP Goat anti-human Protein C, affinity purified IgG
- Cat #: SACP-IG Sheep anti-human Protein C, IgG from antiserum
- Cat #: SACP-AP Sheep anti-human Protein C, affinity purified IgG
- Cat #: SACP-HRP Sheep anti-human Protein C, IgG-peroxidase
- Cat #: PC-EIA Paired antibody set for ELISA of PC, 5 x 96 wells
- Cat #: APCAT-EIA Paired antibody ELISA of APC-αT complex, 5 x 96 wells
- Cat #: APCCP-EIA Paired antibody ELISA of APC-PCI complex, 5 x 96 wells
- Cat #: PC-DP Human plasma deficient in PC, immune depleted
- Cat #: PC-LDP Lyophilized human plasma deficient in PC, immune depleted

Visit our site (www.affinitybiologicals.com) for details.

REFERENCES and REVIEWS