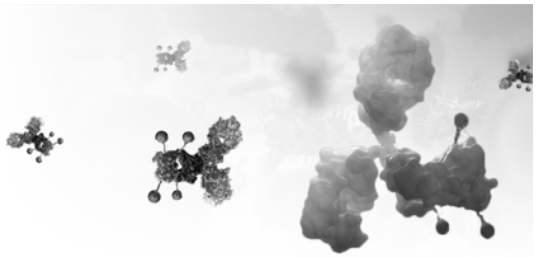

Mouse anti Human Protein C monoclonal antibody (CABT-L473)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	This antibody is specific for Protein C as demonstrated by ELISA.
Target	Protein C, monoclonal
Immunogen	Human Protein C purified from plasma.
Isotype	IgG
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	ELISA
Format	Liquid
Concentration	0.5 mg/ml
Size	0.5 mg
Buffer	10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.
Preservative	None
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.

BACKGROUND

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Introduction	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 hydroxyaspartic acid and 11 γ-carboxyglutamic acid (gla) 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 Arg12 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 α1 Antitrypsin and α2 macroglobulin. The inhibitory activity of PCI is stimulated approximately 10 fold by heparin.
Keywords	PROC;protein C ;inactivator of coagulation factors Va and VIIIa;PC;APC;PROC1;THPH3;THPH4;vitamin K-dependent protein C;prepro-protein C;autoprothrombin IIA;anticoagulant protein C;blood coagulation factor XIV;

GENE INFORMATION

Entrez Gene ID	5624
UniProt ID	P04070

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