



**Anti APC–AAT complexes, neoepitope (human)
Mouse Monoclonal Antibody**

Subclass: IgG₁/kPRODUCT NO. **ABS 001-07**

PRESENTATION Preparation: Protein-A/G purified
Content: 1 mL, 1 mg/mL
Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15mM sodium azide
Storage: In the dark at 4-8°C

ANTIGEN Protein C is a vitamin K-dependent serine protease produced in the liver and made up of 2 polypeptide chains. The 62kDa proenzyme is activated by thrombin and the active enzyme cleaves factor Va and VIIIa and thus inhibits blood coagulation. The molecular weight of the active enzyme is 55kDa and the normal concentrations in human plasma is approximately 1-3 ng/ml because of the very fast turnover, the proenzyme concentration is approximately 3 µg/ml. The activated protein C (APC) is inhibited by members of the serine protease inhibitor (serpin) family, of which alpha₁-antitrypsin (AAT) and protein C inhibitor (PCI) are the most important.

IMMUNOGEN Recombinant form of human activated protein C (Drotrecogin alfa, Xigris)

SPECIFICITY ABS 001-07 has specificity for a conformation-dependent neoepitope that is expressed in activated protein C upon complex-formation with alpha₁-antitrypsin. No reaction is seen to non-complexed alpha₁-antitrypsin and only very little cross reaction to protein C zymogen. Note that specificity is calcium dependent.

EPITOPE SPECIFICITY Not determined

REACTIVITY ABS 001-07 reacts strongly with APC-AAT complexes in ELISA. It can be used in sandwich ELISA in combination with a polyclonal anti-protein C antiserum. Note, that the conformational neoepitope expressed in the APC-AAT complex can also be expressed in APC coated directly onto a high-binding microtiter plate.

CULTURE MEDIUM RPMI 1640 with 2-10% fetal calf serum

FUSION PARTNER SP2mIL6.

IMMUNIZATION NMRI x BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH)₃

Method	Usability	Dilution guideline	References
ELISA	Yes	1:500	
Immunoblotting	Not determined		
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on sandwich ELISA in combination with a polyclonal antibody against the antigen. Users should determine the optimal dilutions for their own purpose.

REFERENCES

- Dahlback B, Villoutreix BO. Molecular recognition in the protein C anticoagulant pathway. J Thromb Haemost 2003; 1:1525-1534.
- Strandberg K, Astermark J, Bjorgell O, Becker C, Nilsson PE, Stenflo J. Complexes between activated protein C and protein C inhibitor measured with a new method: comparison of performance with other markers of hypercoagulability in the diagnosis of deep vein thrombosis. Thromb Haemost 2001; 86:1400-1408.

CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.