

**MONOCLONAL ANTIBODY TO  
HUMAN PROTEIN S (PS)  
clone PS7**



<b>Catalog no</b>	HM2148 (lot number and expiry date are indicated on the label)
<b>Description</b>	Monoclonal antibody PS7 is specific for human Protein S (PS), a vitamin K-dependent plasma glycoprotein with a molecular weight of approximately 70 kDa. In humans, PS is mainly synthesized by hepatocytes. Mature PS has a modular structure consisting of a Gla-domain containing a short aromatic stack, a region sensitive to cleavage by thrombin and factor Xa, 4 epidermal growth factor (EGF)-like domains, and a sex hormone-binding globulin-like region. The biologic function of PS thought to be of primary importance is its ability to enhance Activated Protein C-dependent proteolytic inactivation of factors Va and VIIIa, which are respectively the cofactors in the pro-thrombinase and tenase complexes of the coagulation cascade. In this way, PS plays an important role in regulating thrombin generation, and therefore controlling procoagulant activity. Crucial to the APC-dependent functions of PS is the high-affinity interaction between PS and negatively charged phospholipid surfaces, conferred by calcium-induced folding of the amino-terminal Gla-domain. Monoclonal antibody PS7 allows specific detection of cells carrying PS by flow cytometry.
<b>Aliases</b>	PROS1
<b>Species</b>	Rat IgG <sub>2a</sub>
<b>Formulation</b>	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide.
<b>Application</b>	The monoclonal antibody PS7 can be used for Western blotting and flow cytometry.
<b>Use</b>	For flow cytometry and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.
<b>Storage and stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.
<b>Precautions</b>	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.
<b>Also available</b>	HM2145    Monoclonal antibody against Human Endoth. Protein C Receptor (EPCR), clone RCR-252 HM2146    Monoclonal antibody against Human Thrombomodulin, clone RTM96 HM2148F   FITC conjugated monoclonal antibody against Human Protein S, clone PS7 HM2150    Monoclonal antibody against Human Protein C (PC), clone PC98 HM2151    Monoclonal antibody against Human Activated Protein C (APC), clone PC107