

## Product datasheet for **AM26230FC-N**

### Protein S (PROS1) Rat Monoclonal Antibody [Clone ID: PS7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	PS7
Applications:	WB
Recommended Dilution:	<b>Flow Cytometry:</b> 1/50. <b>Western blot:</b> 1/50.
Reactivity:	Human
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	Monoclonal antibody PS7 is specific for human Protein S (PS), a vitamin K-dependent plasma glycoprotein with a molecular weight of approximately 70 kDa. Allows specific detection of cells carrying PS by flow cytometry.
Formulation:	PBS Label: FITC State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 1% BSA Preservative: 0.02% Sodium Azide
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	FITC
Storage:	Store undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein S (alpha)
Database Link:	<a href="#">Entrez Gene 5627 Human P07225</a>



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**Background:**

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.

**Synonyms:**

PROS