

# Immunotag™ PROS Polyclonal Antibody

Antibody Specification	
Catalog No.	ITN2264
Product Description	Immunotag™ PROS Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PROS
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Reactive Species	Human,Rat,Mouse
Host Species	Rabbit
Immunogen	Synthesized peptide derived from human protein, at AA range: 20-100
Specificity	PROS Polyclonal Antibody detects endogenous levels of protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Gene Name	PROS1 PROS
Accession No.	P07225 Q08761 P53813

## Antibody Specification

Description	protein S (alpha)(PROS1) Homo sapiens This gene encodes a vitamin K-dependent plasma protein that functions as a cofactor for the anticoagulant protease, activated protein C (APC) to inhibit blood coagulation. It is found in plasma in both a free, functionally active form and also in an inactive form complexed with C4b-binding protein. Mutations in this gene result in autosomal dominant hereditary thrombophilia. An inactive pseudogene of this locus is located at an adjacent region on chromosome 3. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate mature protein. [provided by RefSeq, Oct 2015],
Cell Pathway/ Category	Complement and coagulation cascades,
Protein Expression	Liver,Plasma,Trachea,Uterus,
Subcellular Localization	Golgi membrane,extracellular region,extracellular space,endoplasmic reticulum membrane,Golgi lumen,plasma membrane,integral component of membrane,platelet alpha granule lumen,extracellular exosome,blood microparticle,
Protein Function	disease:Defects in PROS1 are the cause of protein S deficiency (PROS1D) [MIM:612336]; also known as thrombophilia due to protein S deficiency. PROS1D is a cause of hereditary thrombophilia, a hemostatic disorder characterized by impaired regulation of blood coagulation and a tendency to recurrent venous thrombosis. However, many adults with heterozygous disease may be asymptomatic. Based on the plasma levels of total and free PROS1 antigen as well as the serine protease-activated protein C cofactor activity, three types of PROS1D have been described: type I, characterized by reduced total and free PROS1 antigen levels together with reduced anticoagulant activity; type III, in which only free PROS1 antigen and PROS1 activity levels are reduced; and the rare type II which is characterized by normal concentrations of both total and free PROS1 antigen, but low cofactor activity.,function:Anticoagulant plasma protein; it is a cofactor to activated protein C in the degradation of coagulation factors Va and VIIIa. It helps to prevent coagulation and stimulating fibrinolysis.,PTM:The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.,similarity:Contains 1 Gla (gamma-carboxy-glutamate) domain.,similarity:Contains 2 laminin G-like domains.,similarity:Contains 4 EGF-like domains.,tissue specificity:Plasma.,
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