

Product Name: PROZ Mouse Monoclonal Antibody**Catalog #: AMM80755**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,ELISA
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	PBS containing 0.03% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	45kDa

Antigen Information

Gene Name	PROZ
Alternative Names	protein Z; PZ
Gene ID	8858.0
SwissProt ID	P22891
Immunogen	Purified recombinant fragment of PROZ expressed in E. Coli.

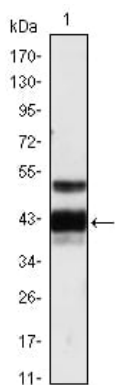
Background

PROZ protein Z, vitamin K-dependent plasma glycoprotein. It is 62 kDa large and 396 amino acids long. It has four domains: a gla-rich region, two EGF-like domains and a trypsin-like domain. It lacks the serine residue that would make it catalytically active as a serine protease. It is a member of the coagulation cascade, the group of blood proteins that leads to the formation

of blood clots. It is vitamin K-dependent, and its functionality is therefore impaired in warfarin therapy. It is a glycoprotein. Although it is not enzymatically active, it is structurally related to several serine proteases of the coagulation cascade: factors VII, IX, X and protein C. The carboxyglutamate residues (which require vitamin K) bind protein Z to phospholipid surfaces. The main role of protein Z appears to be the degradation of factor Xa. This is done by protein Z-related protease inhibitor (ZPI), but the reaction is accelerated 1000-fold by the presence of protein Z. Oddly, ZPI also degrades factor XI, but this reaction does not require the presence of protein Z. In some studies, deficiency states have been associated with a propensity to thrombosis. Others, however, link it to bleeding tendency; there is no clear explanation for this, as it acts physiologically as an inhibitor, and deficiency would logically have led to a predisposition for thrombosis.

Research Area

Image Data



Western blot analysis using PROZ mouse mAb against human plasma (1).