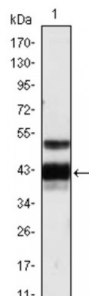


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Protein Z (PROZ) Antibody

Catalogue No.: abx016049



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

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.

Target: PROZ

Reactivity: Human

Host: Mouse

Clonality: Monoclonal

Tested Applications: ELISA, WB

Recommended dilutions: ELISA: 1/10000, WB: 1/500 - 1/2000. Optimal dilutions/concentrations should be determined by the end user.

Immunogen: Purified recombinant fragment of PROZ expressed in *E. coli*.

Purification: Unpurified Ascites.

Isotype: IgG₁

Conjugation: Unconjugated

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Storage: Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.

Molecular Weight: 45 kDa

Swiss Prot: [P22891](#)

GeneID: [8858](#)

Gene Symbol: PROZ

OMIM: [176895](#)

HGNC: 9460

Ensembl: ENSG00000126231

Buffer: Ascitic fluid containing 0.03% sodium azide.

Note: This product is for research use only.