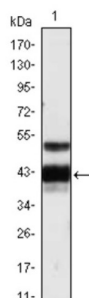


Vitamin K-Dependent Protein Z (PROZ) Antibody

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:	Vitamin K-Dependent Protein Z (PROZ)
Clonality:	Monoclonal
Reactivity:	Human
Tested Applications:	ELISA, WB
Host:	Mouse
Recommended dilutions:	ELISA: 1/10000, WB: 1/500 - 1/2000. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	Purified recombinant fragment of PROZ expressed in E. coli.
Isotype:	IgG ₁
Form:	Liquid
Purification:	Unpurified ascites.

Datasheet

Version: 3.0.0
Revision date: 18 Mar 2025



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

UniProt Primary AC: P22891 ([UniProt](#), [ExPASy](#))

Gene Symbol: PROZ

GeneID: [8858](#)

OMIM: [176895](#)

HGNC: 9460

KEGG: hsa:8858

Ensembl: ENSG00000126231

String: [9606.ENSP00000344458](#)

Molecular Weight: 45 kDa

Buffer: Ascitic fluid containing 0.03% sodium azide.

Concentration: Not determined.

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.