

Product datasheet

Recombinant Human Prothrombin protein ab158398

1 Image

Description

Product name	Recombinant Human Prothrombin protein
Expression system	Wheat germ
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<p>MAHVRGLQLPGCLALAALCSLVHSQHVFAPQQARSLQ RVRRANTFLEE VRKGNLERECVEETCSYEEAFEALSSTATDVFWAKYTA CETARTPRDKL AACLEGNAEGLGTNYRGHVNITRSGIEQLWRSRYPHK EINSTTHPGA DLQENFCRNPDSSTTGPWCYTDPVRRQECVIPVCGQD QVTVAMTPRSE GSSVNLSPPLEQCVPDRGQQYQGR LAVTTHGLPCLAWA SAQAKALSKHQD FNSAVQLVENFCRNPDGDEEGVWCYVAGKPGDFGYCDL NYCEEAVEEETG DGLDESDRAIEGRTATSEYQTFNPRTFGSGEADCGLR PLFEKKSLEDK TERELLESYIDGRIVEGSDAEIGMSPWQVMLFRKSPQELL CGASLISDRW VLTAAHCLLYPPWDKNFTENDLLVRIGKHSRTRYERNIEKIS MLEKIYH PRYNWRENLDRIALMKLKKPVAFSDYIHPVCLPDRETA SLLQAGYKGR VTGWGNLKETWTANVGKQPSVLQVVNLPIVERPVCKDS TRIRITDNMFC AGYKPDEGKRGDACEGDSGGPFVMKSPFNRRWYQMGV SWGEGCDRDGKY GFYTHVFRLLKKWIQKVIDQFGE</p>
Amino acids	1 to 622
Tags	GST tag N-Terminus

Specifications

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Our [Abpromise guarantee](#) covers the use of **ab158398** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA Western blot
Form	Liquid
Additional notes	

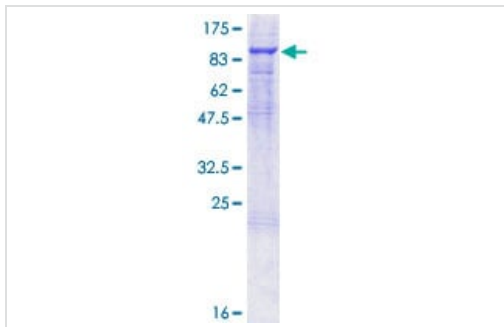
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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General Info

Function	Thrombin, which cleaves bonds after Arg and Lys, converts fibrinogen to fibrin and activates factors V, VII, VIII, XIII, and, in complex with thrombomodulin, protein C. Functions in blood homeostasis, inflammation and wound healing.
Tissue specificity	Expressed by the liver and secreted in plasma.
Involvement in disease	Defects in F2 are the cause of factor II deficiency (FA2D) [MIM:613679]. It is a very rare blood coagulation disorder characterized by mucocutaneous bleeding symptoms. The severity of the bleeding manifestations correlates with blood factor II levels. Genetic variations in F2 may be a cause of susceptibility to ischemic stroke (ISCHSTR) [MIM:601367]; also known as cerebrovascular accident or cerebral infarction. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and environmental risk factors. Defects in F2 are a cause of susceptibility to thrombosis (THR) [MIM:188050]. It is a multifactorial disorder of hemostasis characterized by abnormal platelet aggregation in response to various agents and recurrent thrombi formation. Note=A common genetic variation in the 3-prime untranslated region of the prothrombin gene is associated with elevated plasma prothrombin levels and an increased risk of venous thrombosis.
Sequence similarities	Belongs to the peptidase S1 family. Contains 1 Gla (gamma-carboxy-glutamate) domain. Contains 2 kringle domains. Contains 1 peptidase S1 domain.
Post-translational modifications	The gamma-carboxyglutamyl residues, which bind calcium ions, result from the carboxylation of glutamyl residues by a microsomal enzyme, the vitamin K-dependent carboxylase. The modified residues are necessary for the calcium-dependent interaction with a negatively charged phospholipid surface, which is essential for the conversion of prothrombin to thrombin.
Cellular localization	Secreted > extracellular space.

Images



ab158398 on a 12.5% SDS-PAGE stained with Coomassie Blue.

SDS-PAGE - Recombinant Human Prothrombin protein (ab158398)

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