

## Product datasheet

# Natural Human Prothrombin protein ab62502

### 概述

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产品名称	Natural人Prothrombin protein
蛋白长度	Protein fragment

### 描述

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性质	Native
来源	Native

### 氨基酸序列

种属	Human
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### 技术指标

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Our [Abpromise guarantee](#) covers the use of **ab62502** in the following tested applications.

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

应用	SDS-PAGE Functional Studies
形式	Liquid
补充说明	Concentration varies from lot to lot but is between 5-10mg/ml,

### 制备和贮存

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稳定性和存储	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. Preservative: None Constituents: 50% Glycerol
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### 常规信息

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功能	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.
组织特异性	Expressed by the liver and secreted in plasma.

## 疾病相关

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.

## 序列相似性

Belongs to the peptidase S1 family.

Contains 1 Gla (gamma-carboxy-glutamate) domain.

Contains 2 kringle domains.

Contains 1 peptidase S1 domain.

## 翻译后修饰

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.

## 细胞定位

Secreted > extracellular space.

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