abcam

Product datasheet

Native Rat Thrombin protein ab185262

Description

Product name	Native Rat Thrombin protein
Purity	> 95 % SDS-PAGE.
Expression system	Native
Accession	P18292
Protein length	Full length protein
Animal free	No
Nature	Native
Species	Rat
Sequence	TFGLGEADCGLRPLFEKKSLTDKTEKELLDSYIDGRIVEG WDAEKGIAPW QVMLFRKSPQELLCGASLISDRWVLTAAHCILYPPWDKNF TENDLLVRIG KHSRTRYERNVEKISMLEKIYIHPRYNWRENLDRDIALLKLK KPVPFSDY IHPVCLPDKQTVTSLLQAGYKGRVTGWGNLRETWTTNINEI QPSVLQVVN LPIVERPVCKASTRIRITDNMFCAGFKVNDTKRGDACEGD SGGPFVMKSP YNHRWYQMGIVSWGEGCDRNGKYGFYTHVFRLKRWMQK VIDQHR
Predicted molecular weight	37 kDa
Amino acids	324 to 617
Additional sequence information	Prepared from purified rat prothrombin by activation with Russells Viper Venom. This venom is removed after activation.

Specifications

Our **Abpromise guarantee** covers the use of **ab185262** in the following tested applications.

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

Applications	SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 7.5 Constituents: 0.0132% Sodium citrate, 1.17% Sodium chloride, 0.1% Polyethylene glycol

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	Factor II deficiency Ischemic stroke Thrombophilia due to thrombin defect Pregnancy loss, recurrent, 2
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. N-glycosylated. N-glycan heterogeneity at Asn-121: Hex3HexNAc3 (minor), Hex4HexNAc3 (minor) and Hex5HexNAc4 (major). At Asn-143: Hex4HexNAc3 (minor) and Hex5HexNAc4 (major).
Cellular localization	Secreted, extracellular space.

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