Recombinant THRB protein (His tag)

Catalog Number	546630
Synonyms	Coagulation factor II
Species	Human
Expression System	E. coli
Accession	P00734
Molecular Weight	Predictes a molecular mass of 31.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	364-622
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 364-622 aa (P00734) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Prothrombin Fragment (residues 364-622) is a high-purity protein preparation encompassing the complete Peptidase S1 domain of coagulation factor II. This fragment serves as an essential research tool for investigating thrombin's enzymatic activity and its critical roles in coagulation, inflammation, and wound healing pathways. Prothrombin (Coagulation Factor II) is a secreted serine protease that plays a central role in blood homeostasis, inflammation, and wound healing. Following activation, thrombin cleaves fibrinogen to fibrin and activates multiple coagulation factors including V, VII, VIII, XI, and XIII. In complex with thrombomodulin, it also activates protein C. Beyond coagulation, thrombin triggers pro-inflammatory cytokine production in endothelial cells, including MCP-1/CCL2 and IL8/CXCL8, highlighting its multifaceted role in physiological and pathological processes. The protein is naturally secreted into the extracellular space where it performs its diverse functions.