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Recombinant Human Thrombin (Coagulation Factor II)

Catalog Number: HZ-3010 HEK293 expressed Endotoxin-free Animal-component free

Technical Specifications

Species:
human

Expression:
HEK293

Activity:
N/A

Purity:
>95%

Endotoxin:
<1 EU/μg

Molecular Mass:
36 kDa, glycosylated

Formulation:
20 mM MES pH 6.0 + 500 mM Choline Chloride, See Certificate of Analysis for details

Gene ID:
2147

Reconstitution Buffer

N/A

Stability and Storage

This protein is stable for 1 year from the date of receipt ifstored between (-20°C) and (-80°C). Repeated freeze thaw cycles should be avoided.

Background

Coagulation factors are a group of related proteins that are essential for normal blood clotting (haemostasis). After an injury, clots protect the body by sealing off damaged blood vessels and preventing further blood loss. Prothrombin circulates in the bloodstream in an inactive form until an injury occurs. In response to that, prothrombin is converted to its active form, thrombin. Thrombin next converts a protein called fibrinogen into fibrin. Thrombin is also important for cell growth and division, tissue repair, and new blood vessels formation - angiogenesis (PMID: 11154146; 16549895; 15892853; 12421139).

Synonyms

Coagulation factor II, F2, Prothrombin, PT, Thrombin

For technical support and original validation data for this product please contact:
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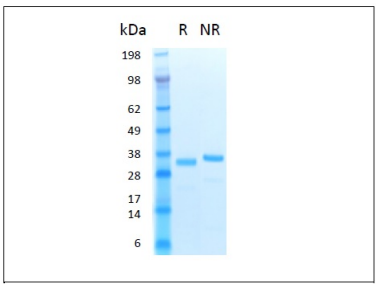
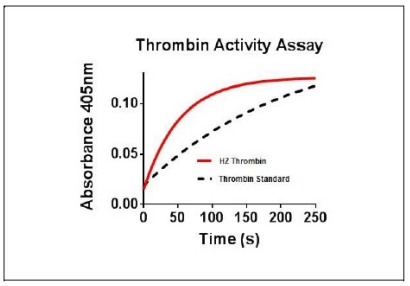
Selected Validation Data



The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue..



The activity of Thrombin and standard Thrombin (1nM) was measured by rates of formation of free chromophore monitored absorbance at 405 nm in the presence of 20 uM Spectrozyme PL (Sekisui Diagnostics, 251L) in the buffer of 5 mM Tris-Cl (pH 8.0), 0.1% PEG, and 200 mM NaCl at 25°C.