For Research Use Only

Recombinant Mouse Coagulation factor II/F2 protein (His Tag)



Catalog Number: Eg0943

Basic Information

Species: Mouse

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Mouse Coagulation factor II protein Gln25-Gly618 (Accession#P19221) with a His tag at the Cterminus.

GeneID:

14061

Accession:

P19221

Predicted Molecular Mass:

69.0 kDa

SDS-PAGE:

65-80 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Normal blood coagulation is a complex process, involving a cascade of activation of different plasma proteins, ultimately resulting in the formation of a clot, called fibrin. Coagulation Factor II (F2), also known as prothrombin or factor II, is one of the components of this chain of plasma proteins involved in blood coagulation. Prothrombin is the precursor of thrombin, which is essential in the processes of hemostasis and thrombosis. 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 vessel formation - angiogenesis.

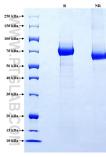
References

- 1. Akhavan S, et al. (2000). Thromb Haemost. 84(6):989-97. 2. Danckwardt S, et al.(2006). Acta Haematol.115(3-4):192-7. 3. Jayandharan G, et al.(2005). Journal of thrombosis and hemostasis. 3(7):1446-53. 4.McGlennen RC, et al. (2002). Arch Pathol Lab Med.126(11):1319-25.

Synonyms

Coagulation factor II, F2, Prothrombin, Activation peptide fragment 1, Activation peptide fragment 2

Selected Validation Data



Purity of Recombinant Mouse Coagulation factor II was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.