

RP01026

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Recombinant Human Kininogen-1/KNG1 Protein

Catalog No.: RP01026

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	3827	P01042-2

Tags

C-His

Synonyms

BDK; BK; KNG; KNG1; BK; KNG

Product Information

Source	Purification
HEK293 cells	> 97% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Kininogen-1 (KNG1) is also known as high molecular weight kininogen, Alpha-2-thiol proteinase inhibitor, Fitzgerald factor, Williams-Fitzgerald-Flaujeac factor, which can be cleaved into the following 6 chains: Kininogen-1 heavy chain, T-kinin, Bradykinin, Lysyl-bradykinin, Kininogen-1 light chain, Low molecular weight growth-promoting factor. Kininogen-1 is a secreted protein which contains three cystatin domains. HMW-kininogen plays an important role in blood coagulation by helping to position optimally prekallikrein and factor XI next to factor XII. As with many other coagulation proteins, the protein was initially named after the patients in whom deficiency was first observed. Patients with HWMK deficiency do not have a hemorrhagic tendency, but they exhibit abnormal surface-mediated activation of fibrinolysis.

Basic Information

Description

Recombinant Human Kininogen-1/KNG1 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln 19 - Ser 427) of human Kininogen-1 (Accession #NP_000884) fused with a 6×His tag at the C-terminus.

Bio-Activity

Measured by its ability to inhibit papain cleavage of a fluorogenic peptide substrate Z-FR-AMC. The IC50 value approximately is 1 nM.

Storage

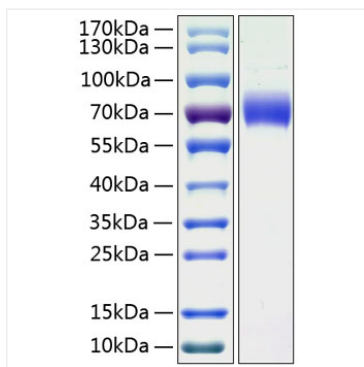
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

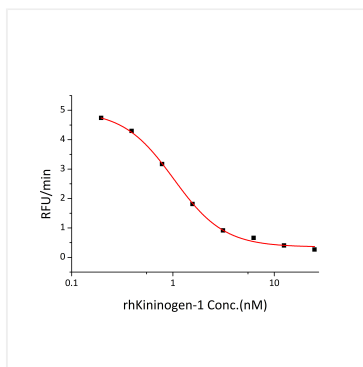


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Validation Data



Recombinant Human Kininogen-1/KNG1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 70 kDa.



Recombinant human KNG1 inhibits papain cleavage of a fluorogenic peptide substrate Z-FR-AMC (Catalog#ES009). The IC₅₀ value approximately is 1nM.