

Recombinant Human Kininogen 1/KNG1 Protein (His Tag)

Catalog No. PKSH033413

Note: Centrifuge before opening to ensure complete recovery of vial contents.

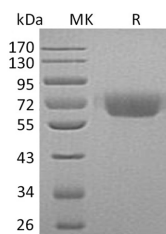
Description

| | |
|------------------------------------|---|
| Synonyms | Kininogen-1;Ipha-2-Thiol Proteinase Inhibitor;Fitzgerald Factor;High Molecular Weight Kininogen;HMWK;Williams-Fitzgerald-Flaujeac Factor;KNG1;BDK;KNG |
| Species | Human |
| Expression Host | HEK293 Cells |
| Sequence | Gln19-Ser427 |
| Accession | P01042-2 |
| Calculated Molecular Weight | 46.9 kDa |
| Observed molecular weight | 61 kDa |
| Tag | C-His |
| Bioactivity | Not validated for activity |

Properties

| | |
|-----------------------|--|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a 0.2 µm filtered solution of 20mM Hac-NaAC, 150mM NaCl, pH 4.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Kininogen-1 is a secreted protein which contains three cystatin domains. There are two alternatively spliced forms, designated as the high molecular weight (HMW) and low MW (LMW) forms. Kininogen-1 plays a critical role in blood coagulation and inflammatory response. Kininogens are inhibitors of thiol proteases. Kininogen-1 participates in blood coagulation by helping to position optimally prekallikrein and factor XI next to factor XII, also inhibits the thrombin- and plasmin-induced aggregation of thrombocytes. The active peptide bradykinin that is released from Kininogen-1 shows a variety of physiological effects: influence in smooth muscle contraction, induction of hypotension, natriuresis and diuresis, decrease in blood glucose level. It is a mediator of inflammation and causes increase in vascular permeability, stimulation of nociceptors release of other mediators of inflammation. It has a cardioprotective effect. LMW-kininogen inhibits the aggregation of thrombocytes and doesn't involved in blood clotting.