

## Recombinant Human Kininogen 1/KNG1 Protein (His Tag)

**Catalog No.** PKSH033413

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

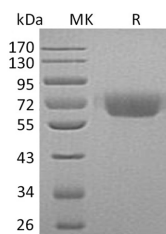
### Description

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

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	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.