

Recombinant Human Kininogen 1/KNG1 Protein (His Tag)

Catalog Number: PKSH033413

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

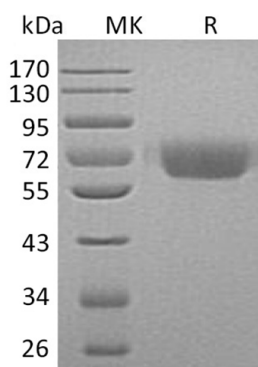
Description

Species	Human
Source	HEK293 Cells-derived Human Kininogen 1/KNG1 protein Gln19-Ser427, with an C-terminal His
Calculated MW	46.9 kDa
Observed MW	61 kDa
Accession	P01042-2
Bio-activity	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

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.