



Recombinant Protein Technical Manual

Recombinant Human Kininogen 1/KNG1 Protein (His Tag)

RPE3767

Product Data:

Product SKU: RPE3767

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: NP_001095886.1

Protein Information:

Molecular Mass: 46.9 kDa

AP Molecular Mass: 61 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Kininogen; Ipha-2-Thiol Proteinase Inhibitor; Fitzgerald Factor; High Molecular Weight Kininogen; HMWK; Williams-Fitzgerald-Flaujeac Factor; KNG1; BDK; KNG

Immunogen Information:

Sequence: Gln19-Ser427

Background:

Kininogen 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 plays a critical role in blood coagulation and inflammatory response. Kininogens are inhibitors of thiol proteases. Kininogen 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 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.