

### Synonym

Fletcher factor, kallikrein B, plasma (Fletcher factor) 1, kininogenin, KLK3 plasma kallikrein, KLKB1, plasma kallikrein heavy chain, plasma kallikrein light chain, Plasma Kallikrein, Plasma Prekallikrein, PPK, KLKB1

### Source

Human Plasma Kallikrein/KLKB1, His Tag (KL1-H52H9) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - Ala 638 (Accession # [P03952-1](#)).

Predicted N-terminus: Gly 20

### Molecular Characterization

Plasma Kallikrein/KLKB1 (Gly 20 - Ala 638) P03952-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 71.1 kDa. The protein migrates as 70-90 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

### Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### Formulation

Supplied as 0.2  $\mu\text{m}$  filtered solution in 50mM Tris 150mM NaCl, pH 7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

### Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.*

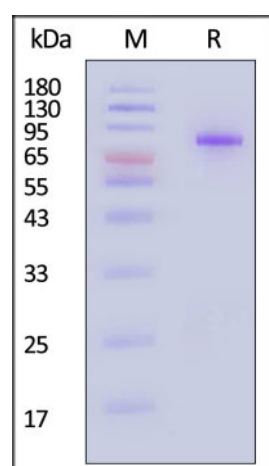
### Storage

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- The product MUST be stored at  $-70^{\circ}\text{C}$  or lower upon receipt;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions.

### SDS-PAGE

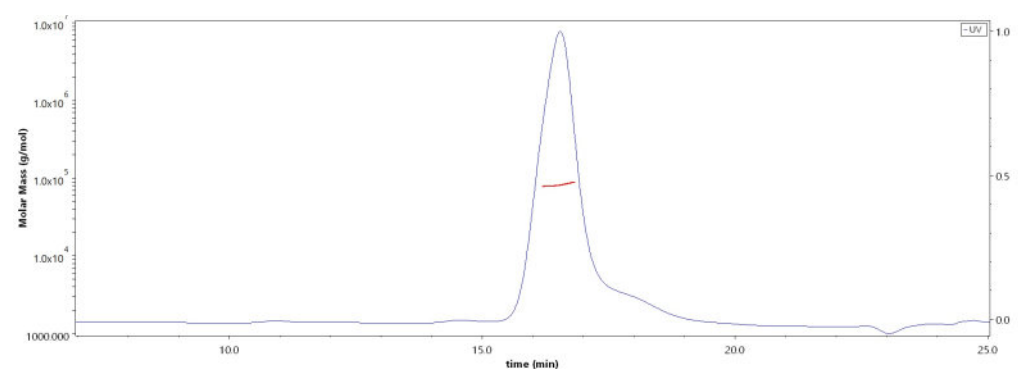


Human Plasma Kallikrein/KLKB1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

### Bioactivity

Measured by its ability to cleave a fluorescent peptide substrate Pro-Phe-Arg-7-amido-4-methylcoumarin (PFR-AMC). The specific activity is  $>1000$  pmol/min/ $\mu\text{g}$  (QC tested).

### SEC-MALS



The purity of Human Plasma Kallikrein/KLKB1, His Tag (Cat. No. KL1-H52H9) is more than 90% and the molecular weight of this protein is around 75-90 kDa verified by SEC-MALS.

### Report

### Background

Human Plasma Kallikrein, a serine protease, is synthesized in the liver and circulates in the plasma by binding to high molecular weight (HMW) kininogen or as a free zymogen. The enzyme cleaves Lys-Arg and Arg-Ser bonds. It activates, in a reciprocal reaction, factor XII after its binding to a negatively charged surface. It also releases bradykinin from HMW kininogen and may also play a role in the renin-angiotensin system by converting prorenin into renin.

### **Clinical and Translational Updates**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.