

Mouse Kallikrein 1 / KLK-1 Protein, His Tag (active enzyme, MALS verified)

Catalog # KL1-M52H3



Synonyms

KLK1, Kallikrein-1, KLKR, Klk6

Source

Mouse Kallikrein 1 Protein, His Tag (KL1-M52H3) is expressed from human 293 cells (HEK293). It contains AA Ile 25 - Asp 261 (Accession # [P15947](#)).

Molecular Characterization

Kallikrein 1(Ile 25 - Asp 261) P15947	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 28.1 kDa. The protein migrates as 11-12 kDa, 18-19 kDa and 32-37 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 µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Shipping and Storage

This product is shipped at ambient temperature.

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

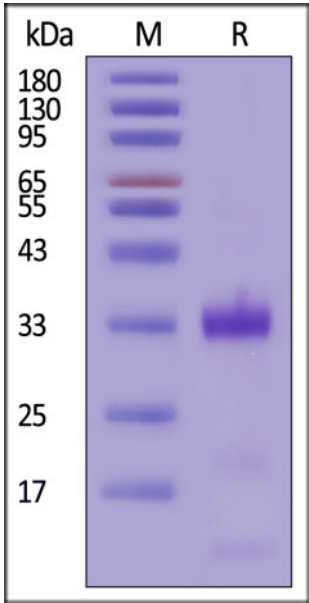
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

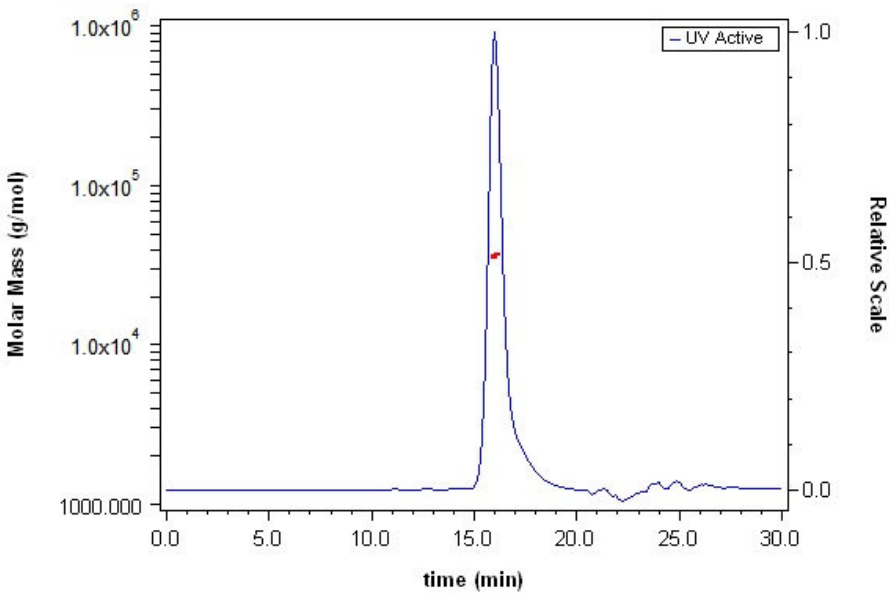
- [QMS\(ISO, GMP\)](#)
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



Mouse Kallikrein 1 Protein, 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](#)).

SEC-MALS



The purity of Mouse Kallikrein 1 Protein, His Tag (Cat. No. KL1-M52H3) is more than 95% and the molecular weight of this protein is around 30-45 kDa verified by SEC-MALS.

Bioactivity

Measured by its ability to cleave a flourogenic peptide substrate Pro-Phe-Arg-7-amido-4-methylcoumarin (PFR-AMC). The specific activity is >15,000 pmol/min/μg (QC tested).

Background

Kallikrein-1 (KLK1) is a tissue serine protease that cleaves low-molecular-weight kininogen to release Lys-bradykinin, a vasoactive peptide regulating vasodilation, vascular permeability, and microcirculation. KLK1 is widely studied in cardiovascular, renal, and inflammatory disorders, and is used in research on kallikrein–kinin pathway biology, drug mechanism studies, and biomarker development.



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