

Synonym

KLK3, Kallikrein-3, APS, KLK2A1, PSA, Hk3, Seminin, Semenogelase

Source

Human Kallikrein 3 Protein, His Tag(KL3-H52H3) is expressed from human 293 cells (HEK293).

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 28.7 kDa. The protein migrates as 33-36 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

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

Storage

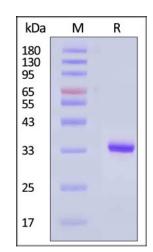
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

SDS-PAGE



Human Kallikrein 3 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity

Measured by its ability to cleave the colorimetric peptide substrate, Succinyl-Arg-Pro-Tyr-p-Nitroanilide (Suc-R-P-Y-pNA). The specific activity is >150 pmol/min/ μ g (QC tested).

Human Kallikrein 3 Protein, His Tag (active enzyme)

Catalog # KL3-H52H3



Background

Kallikrein-3 (KLK3) is also known as Prostate-specific antigen (PSA), APS, Gamma-seminoprotein (Seminin), P-30 antigen, Semenogelase, is a glycoprotein enzyme, is a member of the kallikrein-related peptidase family and is secreted by the epithelial cells of the prostate gland. The preferential cleavage site of KLK3 is "-Tyr-|-Xaa-", the catalytic activity is inhibited by SERPINA5 and is strongly inhibited by Zn2+. KLK3 hydrolyzes semenogelin-1 thus leading to the liquefaction of the seminal coagulum.

Clinical and Translational Updates

