

# Human Kallikrein 3/PSA Protein (active form)

Cat. No. KLK-HM13A

## Description

<b>Source</b>	Recombinant Human Kallikrein 3/PSA Protein (active form) is expressed from HEK293 with His tag at the C-terminus. It contains Ile25-Pro261.
<b>Accession</b>	P07288-1
<b>Molecular Weight</b>	The protein has a predicted MW of 27.7 kDa. Due to glycosylation, the protein migrates to 31-38 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

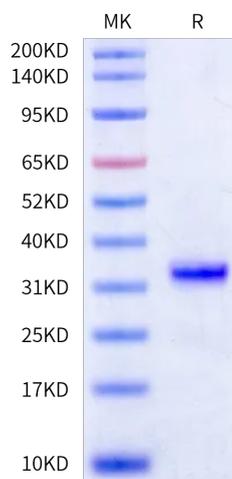
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in 50mM Tris, 150mM NaCl, 0.05% Brij-35 (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Kallikrein-related peptidase 3 (KLK3), also known as prostate-specific antigen (PSA), is the most useful biomarker for prostate cancer (PCa). KLK3 is suggested to play a role in regulating cancer growth through anti-angiogenic activity in vivo and in vitro.

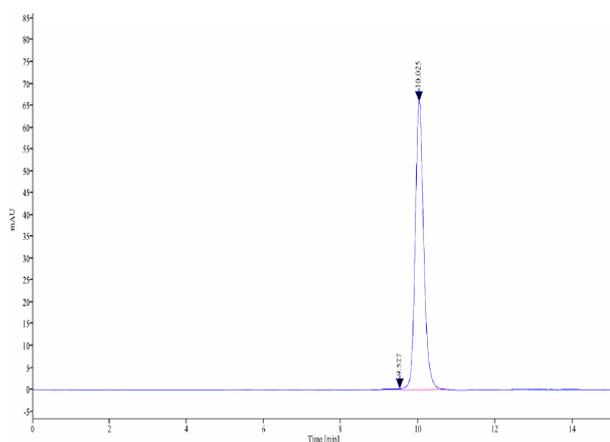
## Assay Data

### Bis-Tris PAGE



Human Kallikrein 3 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



The purity of Human Kallikrein 3 is greater than 95% as determined by SEC-HPLC.

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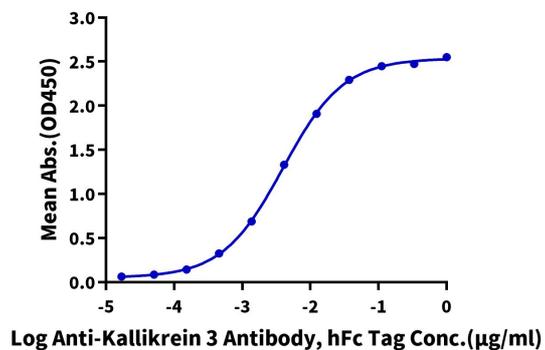
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## Assay Data

### ELISA Data

#### Human Kallikrein 3, His Tag ELISA

0.05µg Human Kallikrein 3, His Tag Per Well



Immobilized Human Kallikrein 3, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-Kallikrein 3 Antibody, hFc Tag with the EC50 of 4.0ng/ml determined by ELISA.

### Bioactivity Data

Measured by its ability to cleave the colorimetric peptide substrate, Succinyl-Arg-Pro-Tyr-p-Nitroanilide (Suc-RPY-pNA). The specific activity is >200 pmol/min/µg.