

# Human Kallikrein 5/KLK5 Protein

Cat. No. KLK-HM105

## Description

<b>Source</b>	Recombinant Human Kallikrein 5/KLK5 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Val23-Ser293.
<b>Accession</b>	Q9Y337
<b>Molecular Weight</b>	The protein has a predicted MW of 30.7 kDa. Due to glycosylation, the protein migrates to 42-48 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

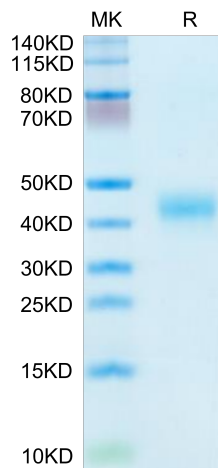
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 50mM MES, 150mM NaCl (pH 5.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in 50mM MES, 150mM NaCl (pH 5.5).
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The inhibition of kallikrein 5 (KLK5) has been identified as a potential strategy for treatment of the genetic skin disorder Netherton syndrome, in which loss-of-function mutations in the SPINK5 gene lead to down-regulation of the endogenous inhibitor LEKTI-1 and profound skin-barrier defects with severe allergic manifestations. To aid in the development of a medicine for this target, an X-ray crystallographic system was developed to facilitate fragment-guided chemistry and knowledge-based drug-discovery approaches.

## Assay Data

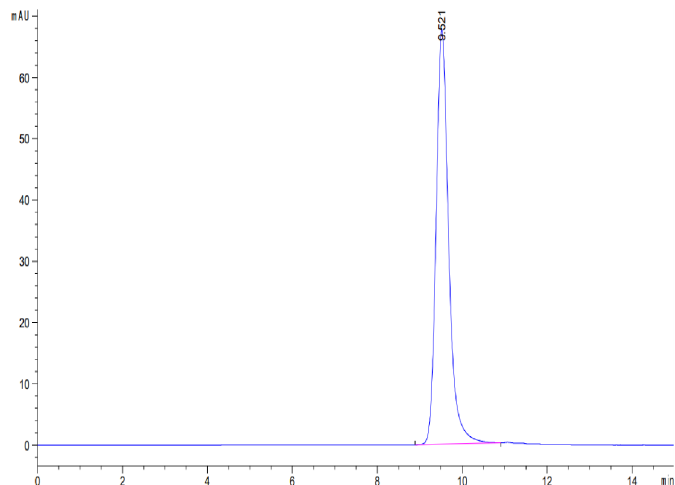
### Tris-Bis PAGE



Human Kallikrein 5 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

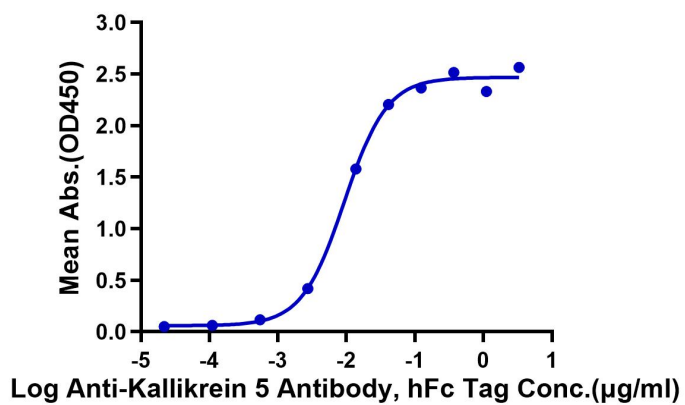


The purity of Human Kallikrein 5 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human Kallikrein 5, His Tag ELISA

0.05µg Human Kallikrein 5, His Tag Per Well



Immobilized Human Kallikrein 5, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-Kallikrein 5 Antibody, hFc Tag with the EC50 of 9.4ng/ml determined by ELISA.