

Human Kallikrein 5/KLK5 Protein

Cat. No. KLK-HM105

Description

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

Formulation and Storage

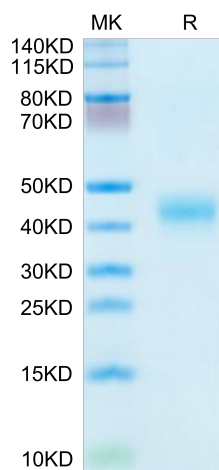
Formulation	Supplied as 0.22 μm filtered solution in 50mM MES, 150mM NaCl (pH 5.5).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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.

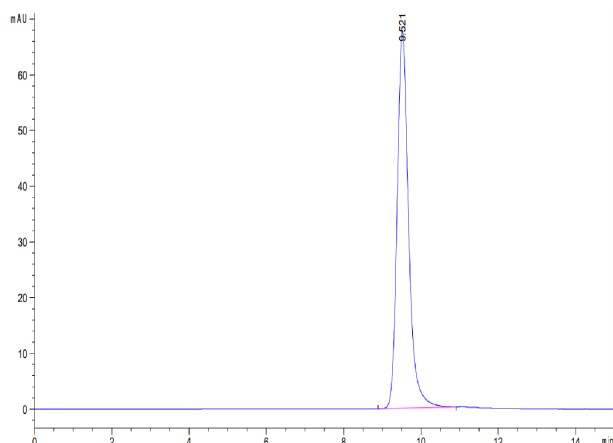
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



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

Human Kallikrein 5/KLK5 Protein

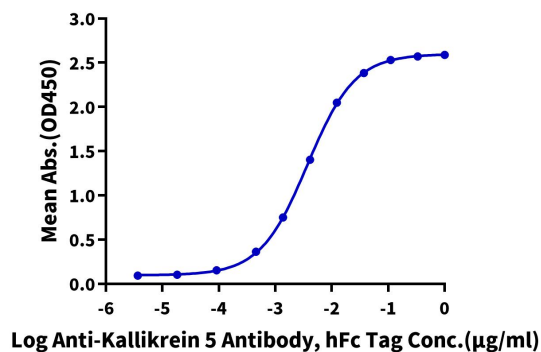
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Assay Data

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 3.7ng/ml determined by ELISA.

Bioactivity Data

Measured by its ability to cleave the fluorogenic peptide substrate Boc-VPR-AMC. The specific activity is >200 pmol/min/µg (QC Test).