

Rev01  
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## DATASHEET

# Kallikrein 5/KLK5, His, Human

Cat. No.: Z05543

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<div> <div>Kallikrein 5/KLK5 (Val23-Ser293)_x000D_ Accession # Q9Y337</div> <div>His</div> </div> <div> <div>N-term</div> <div>C-term</div> </div>
<b>Purity</b>	> 95% as determined by BisTris PAGE > 95% as determined by HPLC
<b>Endotoxin Level</b>	Less than 1EU per µg by the LAL method.
<b>Biological Activity</b>	Measured by its binding ability in a functional ELISA. Immobilized Kallikrein 5/KLK5, His, Human at 0.5µg/ml (100µl/Well) on the plate can bind AntiKallikrein 5 Antibody, hFc Tag. Test result was comparable to standard batch. Measured by its ability to cleave the fluorogenic peptide substrate BocVPRAMC. The specific activity is >200 pmol/min/µg. Test result was comparable to standard batch
<b>Expression System</b>	HEK293
<b>Theoretical Molecular Weight</b>	30.7 kDa
<b>Apparent Molecular Weight</b>	Due to glycosylation, the protein migrates to 42-48 kDa based on Bis-Tris PAGE result.
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 50mM MES, 150mM NaCl (pH 5.5).
<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 &amp; Stability</b>	Upon receiving, the product remains stable up to 6 months at -20 °C or below. Upon reconstitution, the product should be stable for 3 months at -80 °C. Avoid repeated freeze-thaw cycles.

## Background

**Target 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.

**Synonyms :** Kallikrein c; Klnc; KLK5; KLKL2; KLK-L2; SCTE

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