

# Biotinylated Human Kallikrein 7/KLK7 Protein (active form)

Cat. No. KLK-HM407B

## Description

<b>Source</b>	Recombinant Biotinylated Human Kallikrein 7/KLK7 Protein (active form) is expressed from HEK293 with His tag and Avi tag at the C-terminus. It contains Ile30-Arg253.
<b>Accession</b>	P49862
<b>Molecular Weight</b>	The protein has a predicted MW of 27.35 kDa. Due to glycosylation, the protein migrates to 27-35 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

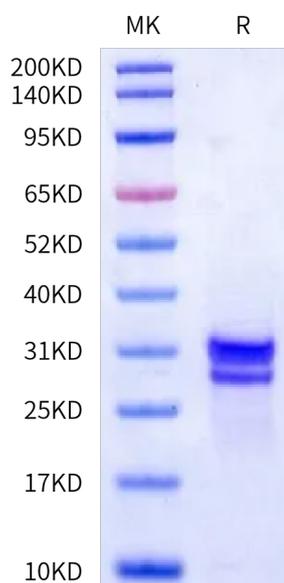
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in 20mM HEPES, 150mM NaCl, 8% trehalose, 0.05% Brij-35, 5mM Benzamidine (pH 7.5).
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</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 7 (KLK7) is a secreted serine protease with chymotrypsic protease activity. Abnormally high expression of KLK7 is closely related to the occurrence and development of various types of cancer. Therefore, KLK7 has been identified as a potential target for cancer drug development design in recent years. KLK7 mediates various biological and pathological processes in tumorigenesis, including cell proliferation, migration, invasion, angiogenesis, and cell metabolism, by hydrolyzing a series of substrates such as membrane proteins, extracellular matrix proteins, and cytokines.

## Assay Data

### Bis-Tris PAGE



Biotinylated Human Kallikrein 7 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

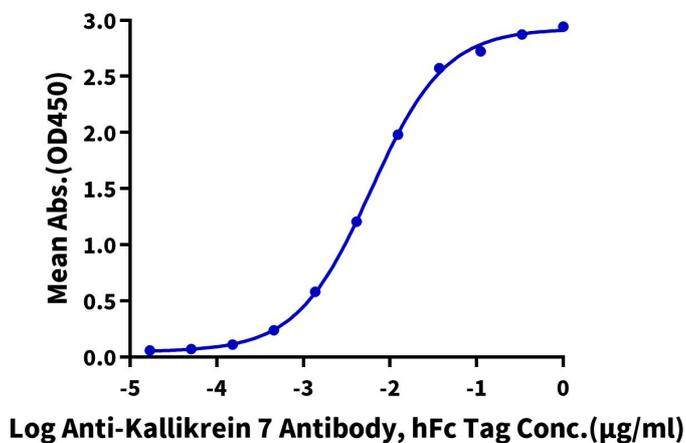
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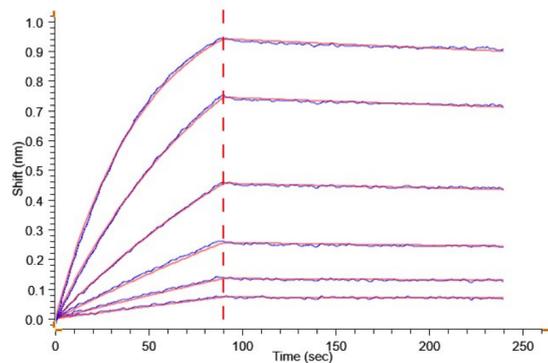
### Biotinylated Human Kallikrein 7, HisAvi Tag ELISA

0.2µg Biotinylated Human Kallikrein 7, His Avi Tag Per Well



Immobilized Biotinylated Human Kallikrein 7, His Avi Tag at 2µg/ml (100µl/well) on the streptavidin precoated plate (5µg/ml). Dose response curve for Anti-Kallikrein 7 Antibody, hFc Tag with the EC50 of 6.0ng/ml determined by ELISA.

### BLI Data



Loaded Anti-Kallikrein 7 Antibody, hFc Tag on ProA-Biosensor can bind Biotinylated Human Kallikrein 7, His-Avi Tag with an affinity constant of 0.71 nM as determined in BLI assay .

### Bioactivity Data

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH<sub>2</sub>. The specific activity is >400 pmol/min/µg.