

Human Kallikrein 7/KLK7 Protein (active form), Ultra Low Endotoxin



Cat. No. KLK-HM007-UL

Description

Source	Recombinant Human Kallikrein 7/KLK7 Protein is expressed from HEK293 without tag. It contains Ile30-Arg253.
Accession	P49862
Molecular Weight	The protein has a predicted MW of 24.44 kDa. Due to glycosylation, the protein migrates to 25-30 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 90% as determined by Bis-Tris PAGE

Formulation and Storage

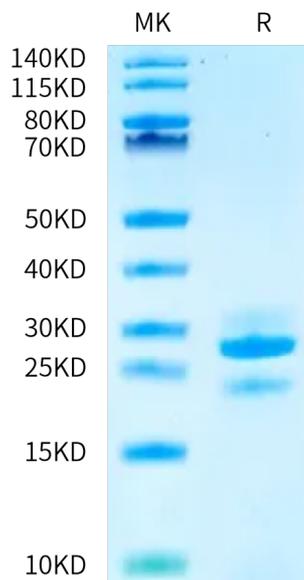
Formulation	Lyophilized from 0.22 µm filtered solution in 20mM HEPES, 150mM NaCl, 8% trehalose, 0.05% Brij-35, 5mM Benzamidine (pH 7.5).
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 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



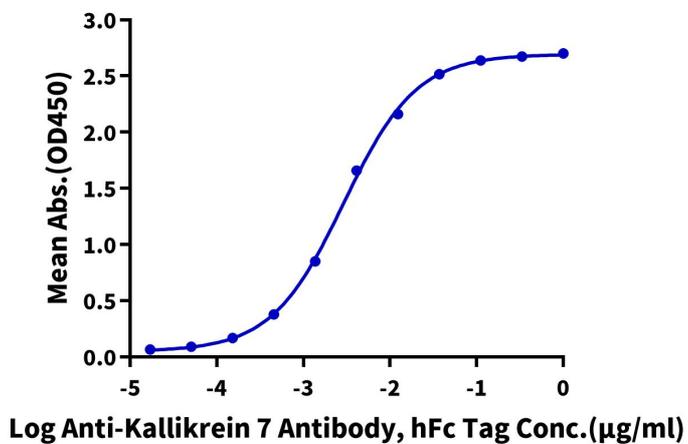
Human Kallikrein 7 on Bis-Tris PAGE under reduced condition. The purity is greater than 90%.

ELISA Data

Assay Data

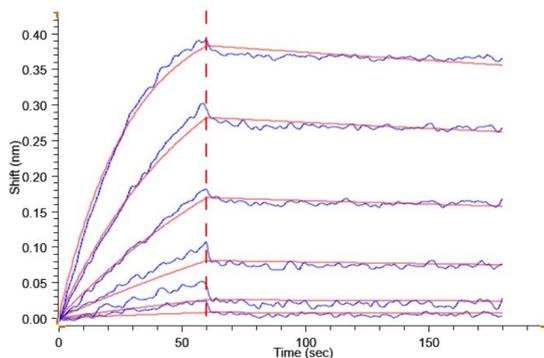
Human Kallikrein 7, No Tag ELISA

0.05µg Human Kallikrein 7, No Tag Per Well



Immobilized Human Kallikrein 7, No Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-Kallikrein 7 Antibody, hFc Tag with the EC50 of 2.9ng/ml determined by ELISA.

BLI Data



Loaded Anti-Kallikrein 7 Antibody, hFc Tag on HFC-Biosensor can bind Human Kallikrein 7, No Tag with an affinity constant of 0.91 nM as determined in BLI assay .

Bioactivity Data

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH₂. The specific activity is >350 pmol/min/µg.