

Active Recombinant Human KLK2 protein, His-tagged

Cat. No. KLK2-152H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human KLK2(Met1-Pro261) fused with His tag at C-terminal was expressed in NS0.
Species	Human
Source	Mammalian Cells
ProteinLength	1-261 a.a.
Description	Kallikrein 2 (KLK2) is a secreted serine protease that is highly expressed in the human prostate gland. It is also known as the prostate-specific glandular kallikrein. The enzyme is highly specific for cleavage after arginine residues. KLK2 is able to activate the urokinase-type plasminogen activator. KLK2 is inhibited by serpins such as protein C inhibitor, antichymotrypsin, and plasminogen activator inhibitor 1. KLK2 is structurally related to KLK3, the prostate-specific antigen (PSA). Like PSA, KLK2 is considered to be a biomarker for prostate cancer.
Predicted N Terminal	Ile25 & Leu124
Form	Supplied as a 0.2 µm filtered solution in Sodium Citrate and NaCl.
Bio-activity	Measured by its ability to cleave a flourogenic peptide substrate Pro-Phe-Arg-7-amid o-4-methylcoumarin (PFR-AMC). The specific activity is >125 pmol/min/µg.
Molecular Mass	Predicted Molecular Mass: 28 & 16 kDa;SDS-PAGE: 34 kDa & 15-18 kDa, reducing

 Tel: 1-631-559-9269 1-516-512-3133

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	conditions.
Endotoxin	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>85%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain at 5 µg per lane
Storage	Avoid repeated freeze-thaw cycles.6 months from date of receipt, -70 centigrade as supplied.3 months, -70 centigrade under sterile conditions after opening.

GENE INFORMATION

Gene Name	KLK2 kallikrein-related peptidase 2 [Homo sapiens]
Official Symbol	KLK2
Synonyms	KLK2; kallikrein-related peptidase 2; kallikrein 2, prostatic; kallikrein-2; tissue kallikrein-2; glandular kallikrein 2; glandular kallikrein-1; hK2; hGK-1; KLK2A2; FLJ17010; FLJ17011; MGC12201;
Gene ID	3817
mRNA Refseq	NM_001002231
Protein Refseq	NP_001002231
MIM	147960
UniProt ID	P20151
Chromosome	19q13.33

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Location**Pathway**

Activation of Matrix Metalloproteinases, organism-specific biosystem; Coregulation of Androgen receptor activity, organism-specific biosystem; Degradation of the extracellular matrix, organism-specific biosystem; Endocrine and other factor-regulated calcium reabsorption, organism-specific biosystem; Endocrine and other factor-regulated calcium reabsorption, conserved biosystem; Extracellular matrix organization, organism-specific biosystem

Function

peptidase activity; serine-type endopeptidase activity;

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