

Plasma kallikrein/KLKB1 Protein, Human (HEK293, His)

Cat. No.:	HY-P70249A
Synonyms:	Plasma kallikrein; PKK; KLK3; KLKB1; Fletcher factor; Kininogenin
Species:	Human
Source:	HEK293
Accession:	P03952 (G20-A638)
Gene ID:	3818
Molecular Weight:	72-80 kDa

PROPERTIES

AA Sequence

G C L T Q L Y E N A	F F R G G D V A S M	Y T P N A Q Y C Q M	R C T F H P R C L L
F S F L P A S S I N	D M E K R F G C F L	K D S V T G T L P K	V H R T G A V S G H
S L K Q C G H Q I S	A C H R D I Y K G V	D M R G V N F N V S	K V S S V E E C Q K
R C T N N I R C Q F	F S Y A T Q T F H K	A E Y R N N C L L K	Y S P G G T P T A I
K V L S N V E S G F	S L K P C A L S E I	G C H M N I F Q H L	A F S D V D V A R V
L T P D A F V C R T	I C T Y H P N C L F	F T F Y T N V W K I	E S Q R N V C L L K
T S E S G T P S S S	T P Q E N T I S G Y	S L L T C K R T L P	E P C H S K I Y P G
V D F G G E E L N V	T F V K G V N V C Q	E T C T K M I R C Q	F F T Y S L L P E D
C K E E K C K C F L	R L S M D G S P T R	I A Y G T Q G S S G	Y S L R L C N T G D
N S V C T T K T S T	R I V G G T N S S W	G E W P W Q V S L Q	V K L T A Q R H L C
G G S L I G H Q W V	L T A A H C F D G L	P L Q D V W R I Y S	G I L N L S D I T K
D T P F S Q I K E I	I I H Q N Y K V S E	G N H D I A L I K L	Q A P L N Y T E F Q
K P I C L P S K G D	T S T I Y T N C W V	T G W G F S K E K G	E I Q N I L Q K V N
I P L V T N E E C Q	K R Y Q D Y K I T Q	R M V C A G Y K E G	G K D A C K G D S G
G P L V C K H N G M	W R L V G I T S W G	E G C A R R E Q P G	V Y T K V A E Y M D
W I L E K T Q S S D	G K A Q M Q S P A		

Biological Activity

Immobilized Human KLKB1, His Tag at 2 µg/mL (100 µl/well) on the plate. Dose response curve for Anti-KLKB1 Antibody, hFc Tag with the EC₅₀ of ≤33.8 ng/mL determined by ELISA.

Appearance

Lyophilized powder.

Formulation

Lyophilized from 0.22 µm filtered solution in 20 mM NaAc, 150 mM NaCl, pH 5.0. Normally 8% trehalose is added as protectant before lyophilization.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in 20 mM NaAc, 150 mM NaCl, pH 5.0.

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION**Background**

Plasma kallikrein (KLKB1) is an enzyme with the ability to cleave Lys-Arg and Arg-Ser bonds, facilitating the release of bradykinin from HMW kininogen. Additionally, KLKB1 plays a pivotal role in the activation of factor XII through a reciprocal reaction, particularly following its binding to a negatively charged surface. Beyond its involvement in the kinin system, this enzyme may contribute to the renin-angiotensin system by converting prorenin into renin.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA