

Active Recombinant Human Kallikrein B, Plasma (Fletcher factor) 1, His-tagged

Cat. No. KLKB1-483H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinanthuman KLKB1 protein with a C-terminal 6-His tag was expressed in Murine myeloma cell line, NS0-derived. Gly20 - Ala638.
Species	Human
Source	Mammalian Cells
Protein Length	20-638 a.a.
Description	Human KLKB1, aserine protease, is synthesized in the liver and circulates in the plasma by binding to high molecular weight (HMW) kininogen or as a free zymogen. Once activated by its physiological activator, factor XII, it displays endopeptidase activity towards peptide bonds after arginine (preferred) and lysine. It cleaves HMW kininogen, its major physiological substrate, to release the potent vasodilator peptide bradykinin.
Form	Lyophilized from a 0.2 µm filtered solution in MES and NaCl.
N-terminal Sequence	Gly20
Molecular Weight	70 kDa
Activity	Measured by its ability to cleave a fluorescent peptide substrate ProPheArg7amido4methylcoumarin (PFRAMC). The specific activity is > 1,000 pmoles/min/µg, as measured

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under the described conditions. See Activity Assay Protocol.

Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Reconstitution	Reconstitute at 500 µg/mL in sterile 25 mM MES and 150 mM NaCl, pH 5.5.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.

GENE INFORMATION

Gene Name	KLKB1 kallikrein B, plasma (Fletcher factor) 1 [Homo sapiens]
Official Symbol	KLKB1
Synonyms	KLKB1; kallikrein B, plasma (Fletcher factor) 1; PPK; KLK3; plasma kallikrein; kininogenin; Fletcher factor; plasma prekallikrein; plasma kallikrein heavy chain; plasma kallikrein light chain
Gene ID	3818
mRNA Refseq	NM_000892
Protein Refseq	NP_000883
MIM	229000
UniProt ID	P03952

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Chromosome Location	4q35
Pathway	Blood Clotting Cascade; Complement and Coagulation Cascades; Formation of Fibrin Clot (Clotting Cascade); Hemostasis; Intrinsic Pathway
Function	peptidase activity; protein binding; serine-type endopeptidase activity
PDB rendering based on 2anw.	