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Datasheet for ABIN7533877
Kallikrein 1 Protein (KLK1) (His tag)

Overview

Quantity:	100 µg
Target:	Kallikrein 1 (KLK1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This Kallikrein 1 protein is labelled with His tag.

Product Details

Purpose:	Active Recombinant Human Kallikrein-1/KLK1 Protein
Sequence:	MWFLVLCLAL SLGGTGAAPP IQSRIVGGWE CEQHSQPWQA ALYHFSTFQC GGILVHRQWV LTAAHCISDN YQLWLGRHNL FDDENTAQFV HVSESFPHPG FNMSLLENHT RQADEDYSHD LMLLRLTEPA DTITDAVKV V ELPTEEPEVG STCLASGWGS IEPENFSFPD DLQCVDLKIL PNDECKKAHV QKVTFMMLCV GHLEGGKDTC VGDSGGPLMC DGVLQGVTSW GYVPCGTPNK PSVAVRVLSY VKWIEDTIAE NS
Specificity:	Met1-Ser262
Purity:	> 95 % by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	< 0.1 EU/µg of the protein by LAL method.
Biological Activity Comment:	Measured by its ability to cleave a flourogenic peptide substrate Pro-Phe-Arg-7-amido-4-methylcoumarin (PFR-AMC). The specific activity is >9209 pmol/min/µg.

Target Details

Target: Kallikrein 1 (KLK1)

Alternative Name: Kallikrein-1/KLK1 ([KLK1 Products](#))

Background: Description: This protein is the class A macrophage scavenger receptors, which include three different types (1, 2, 3) generated by alternative splicing of this gene. These receptors or isoforms are macrophage-specific trimeric integral membrane glycoproteins and have been implicated in many macrophage-associated physiological and pathological processes including atherosclerosis, Alzheimer's disease, and host defense. The isoforms type 1 and type 2 are functional receptors and are able to mediate the endocytosis of modified low density lipoproteins (LDLs). The isoform type 3 does not internalize modified LDL (acetyl-LDL) despite having the domain shown to mediate this function in the types 1 and 2 isoforms. It has an altered intracellular processing and is trapped within the endoplasmic reticulum, making it unable to perform endocytosis. The isoform type 3 can inhibit the function of isoforms type 1 and type 2 when co-expressed, indicating a dominant negative effect and suggesting a mechanism for regulation of scavenger receptor activity in macrophages.

Name: KLK1, KLKR, Klk6, hK1

Gene ID: 3816

UniProt: [P06870](#)

Pathways: [Complement System](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1 % BSA, 5 % HSA, 10 % FBS or 5 % Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Buffer: Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Storage: -20 °C, -80 °C

Storage Comment: Store the lyophilized protein at -20°C to -80 °C for long term.
After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1

week.