www.neobiolab.com
info@neobiolab.com
888.754.5670, +1 617.500.7103 United States
0800.088.5164, +44 020.8123.1558 United Kingdom

# KLK1 Human, His

**Description:**Kallikrein-1 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 259 amino acids (25-262) and having a molecular mass of 28.7kDa.KLK1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

**Synonyms:**KLK1, KLK-1, HK1, HK-1, KLKR, KLK6, Tissue Kallikrein, hKLK1, EC 3.4.21.35, Kidney/pancreas/salivary gland kallikrein, Kallikrein-1.

**Source:**Escherichia Coli.

**Physical Appearance:**Sterile Filtered clear solution.

**Amino Acid Sequence:**MGSSHHHHHH SSGLVPRGSH MIVGGWECEQ HSQPWQAALY HFSTFQCGGI LVHRQWVLTA AHCISDNYQL WLGRHNLFDD ENTAQFVHVS ESFPHPGFNM SLLENHTRQA DEDYSHDLML LRLTEPADTI TDAVKVVELP TQEPEVGSTC LASGWGSIEP ENFSFPDDLQ CVDLKILPND ECKKVHVQKV TDFMLCVGHL EGGKDTCVGD SGGPLMCDGV LQGVTSWGYV PC

**Purity:**Greater than 90.0% as determined by SDS-PAGE.

**Formulation:**
The KLK1 solution (0.25mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl, 10% glycerol and 1mM DTT.

**Stability:**
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.

**Usage:**
NeoBiolab's products are furnished forLABORATORY RESEARCHUSEONLY. The product may not be used as drµgs, agricultural or pesticidal products, food additives or household chemicals.

**Introduction:**
Kallikreins are serine protease enzymes having various physiological functions. Kallikreins are implicated in carcinogenesis and have potenital as novel cancer disease biomarkers. KLK1 is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. KLK1 is functionally conserved in its ability to release the vasoactive peptide, Lys-bradykinin, from low molecular weight kininogen.Human Kallikrein-1, also called as Kallidinogenase, Kininogenase or Kininogenin, is an active protein enzyme present in saliva, pancreatic juices, and urine that catalyzes the proteolysis of bradykininogen to bradykinin. Kallikrein-1, which derived from human or porcine, have been used as drµgs for a long time, they are mainly used in the treatment f light to medium hypertension and occlusion of cerebral and surrounding blood vessels. KLK1 demonstrates both trypsin- and chymotrypsin-like selectivities with Tyr/Arg preferred at site P1, Ser/Arg strongly preferred at P1', and Phe/Leu at P2. rs5517 in the KLK1 gene is considerably connected with hypertension in a Chinese Han population. KLK1 is expressed de novo in endothelial cells and mediates relaxation of human umbilical veins. The K allele of KLK1 promoter and TT genotype of TGF-beta1 are a genetic KLK1 -130 GN and -128 G-C, and the

© 2015 NeoScientific

www.neobiolab.com
info@neobiolab.com
888.754.5670, +1 617.500.7103 United States
0800.088.5164, +44 020.8123.1558 United Kingdom

defenselessness factor contributing to progressive renal descent in Taiwanese primary vesicoureteric reflux children. Induction of KLK1 in carotid arteriosclerosis doesnt lead to kallikrein-kinins pathway activation. Transgenic rats expressing KLK1 have impaired renal response to acute volume expansion Endothelial cells synthesize and release active form of KLK1on the surface which is important function in maintenance of circulation homeostasis. KLK1 participates in epidermal desquamation throμgh cleavage of desmoglein 1 and regulation by lympho-epithelial Kazal-type-related inhibitor (LEKTI).

***To place an order, please Click HERE.***

**Catalog #:**ENPS-697

For research use only.

© 2015 NeoScientific


Copyrights @ 2013 NEO Group 245 First Street, 18th Floor, Cambridge MA 02142 888.754.5670 (toll-free)

Request a CATALOG CLICK HERE