

Recombinant Human KLOTHO, His-tagged

Cat. No. KL-47H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human KL is produced in CHO cells and fused with a C-terminal 6xHis Tag. The Klotho His Tagged Fusion Protein is 59.5kDa protein containing a total of 522 amino acid residues and purified by proprietary chromatographic techniques.

Species Human

Source CHO

Description This gene encodes a type-I membrane protein that is related to beta-glucosidases. Reduced production of this protein has been observed in patients with chronic renal failure (CRF), and this may be one of the factors underlying the degenerative processes (e.g., arteriosclerosis, osteoporosis, and skin atrophy) seen in CRF. Also, mutations within this protein have been associated with ageing and bone loss.

Form Klotho Human recombinant was filtered (0.4µm) and lyophilized from 0.5 mg/ml in 0.08M phosphate buffer and 0.1M NaCl, pH 7.2.

Molecular Mass 59.5kDa

AA Sequence
 EPGDGAQTWA RFSRPPAPEA AGLFQGTFPD GFLWAVGSAA YQTEGGWQQH
 GKGASIWDTF THHPLAPPGD SRNASLPLGA PSPLQPATGD VASDSYNNVF
 RDTEALRELG VTHYRFSISW ARVLPNGSAG VPNREGLRYY RLLERLREL
 GVQPVVTLYH WDLQPRLQDA YGGWANRALA DHFRDYAELC FRHFGGQVKY
 WITIDNPYVV AWHGYATGRL APGIRGSPRL GYLVAHNLLL AHAKVWHLYN
 TFSRPTQGGQ VSIALSSHWI NRRRMTDHSI KECQKSLDFV LGWFAKPVFI

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DGDYPESMKN NLSSILPFFT ESEKKFIKGT ADFFALCFGP TLSFQLLDPH
 MKFRQLESPN LRQLLSWIDL EFNHPQIFIV ENGWFVSGTT KRDDAKYMY
 LKKFIMETLK AIKLDGVDVI GYTAWSLMDG FEWHRGYSIR RGLFYVDFLS
 QDKMLLPKSS ALFYQKLIK NGFPPLPENQ PLEGTFFPCDF AWGVVDNYIQ
 VSQTKPISS LTKPYHHHHH HH.

Purity Greater than 90% as determined by SDS-PAGE.

Applications ELISA, Immunoassays, Western blotting.

Stability Store lyophilized Klotho Human recombinant at -20°C. Aliquot Klotho after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

Reconstitution It is recommended to add to Klothodeionized water to prepare a working stock solution of 0.5mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter Klothoby an appropriate sterile filter before using it in the cell culture.

GENE INFORMATION

Gene Name [KL klotho \[Homo sapiens \(human\) \]](#)

Official Symbol KL

Synonyms KL; klotho; EC 3.2.1.31; Klotho peptide; OTTHUMP00000018796; NP_004786.2

Gene ID [9365](#)

mRNA Refseq [NM_004795](#)

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Protein Refseq	NP_004786
MIM	604824
UniProt ID	Q9UEF7
Chromosome Location	13q12
Pathway	Adaptive Immune System; Constitutive PI3K/AKT Signaling in Cancer; Downstream signal transduction
Function	beta-glucosidase activity; beta-glucuronidase activity; fibroblast growth factor binding

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