

Klotho Active Protein | KL active protein

Klotho protein

CATALOG #
AAA75575HOST
CHO cells

PRODUCT SYNONYMS

Klotho; Klotho protein; aKlotho protein; KLA protein; KL active protein

PRODUCT SPECIFICATIONS

Host	CHO cells
Purity/Purification	> 98% pure
Form/Format	Lyophilized from 15mM Sodium Phosphate pH 7.3 0.2 micron filtered. Centrifuge vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.
Concentration	20 ug/vial; lyophilized (varies by lot)
Sequence	EPGDGAQTWA RFSRPPAPEA AGLFQGTFPD GFLWAVGSAA YQTEGGWQQH GKGASIWDTF THHPLAPPGD SRNASLPLGA PSPLQPATGD VASDSYNNVF RDTEALRELG VTHYRFSISW ARVLPNGSAG VPNREGLRYY RRLLELREL GVQPVVTLYH WDLPLQLQDA YGGWANRALA DHFRDYAELC FRHFGGQVKY WITIDNPYVV AWHGYATGRL APGIRGSPRL GYLVAHNLLL AHAKVWHLYN TSFRPTQGGQ VSIALSSHWI NPPRMTDHSI KECQKSLDFV LGWFAKPVFI DGDYPESMKN NLSSILPDT ESEKKFIKGT ADFFALCFGP TLSFQLLDPH MKFRQLESPN LRQLLSWIDL EFNHPQIFV ENGWFVSGTT KRDDAKYMY LKKFIMETLK AIKLDGVDVI GYTAWSLMDG FEWHRGYSIR RGLFYVDFLS QDKMLLPKSS ALFYQKLIK NGFPPLPENQ PLEGTFCDF AWGVVDNYIQ VSQLTKPISS LTKPYH.
Protein Type	Recombinant
Biological Significance	Klotho is a glycosylated protein that plays an important role in the regulation of phosphate and calcium homeostasis. Human Klotho exists in both membrane bound and secreted forms, and is predominantly expressed in the kidney convoluted tubules, and to a lesser extent, in the brain, reproductive organs, endocrine glands, urinary bladder, skeletal muscle, placenta, and colon,. The full length transmembrane form has a large extracellular domain composed of two homologous subunits termed KL1 and KL2, which contain 516 and 439 amino acid residues, respectively. The predominant circulating form, which is derived from alternative RNA splicing, contains the KL1 subunit and constitutes the N-terminal sequence of transmembrane Klotho. A third Klotho protein of about 128 kDa has been identified in the blood and cerebrospinal fluid.
Bioactivity	Determined by the dose-dependent stimulation of the proliferation of Mouse NIH-3T3 cells. Recombinant human Klotho is effective in a concentration range of 0.5-2.0 ug/ml.
Endotoxin Levels	Endotoxin level is less than 0.1 ng per ug (1 EU/ug).
Species	Human
Additional Remarks	Effective at a concentration of 0.5-2.0 ug/ml
Preparation and Storage	Ships ambient of refrigerated. Upon receipt store at 4 degree C short term, -20 degree C long term. After reconstituted, the solution can be stored at 4 degree C for up to 1 week. Working aliquots stored with a carrier protein are stable for at least 3 months at -20 degree C. Avoid repeated freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for KL
active protein

Purified recombinant Human Klotho protein

NCBI AND UNIPROT INFORMATION

NCBI GI #	2618596
NCBI GeneID	9365
UniProt Accession #	Q9UEF7; Q5VZ95; Q96KV5; Q96KW5; Q9UEI9; Q9Y4F0
Molecular Weight	62,135 Da
NCBI Official Full Name	klotho
NCBI Official Synonym Full Names	klotho
NCBI Official Symbol	KL
NCBI Protein Information	klotho
UniProt Protein Name	Klotho
UniProt Gene Name	KL
UniProt Entry Name	KLOT_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.