

Recombinant Human KL, Fc-tagged

Cat. No. KL-386H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Signal peptide and the extracellular domain of human Klotho (aa 1-981) are fused at the C-terminus to the Fc portion of human IgG1.
Species	Human
Source	HEK293
ProteinLength	1-981 a.a.
Description	Klotho is involved in the regulation of calcium and phosphorus homeostasis by inhibiting the synthesis of active vitamin D. It is an essential factor for the specific interaction between FGF23 and FGFR1. The secreted Klotho protein can regulate multiple growth factor signaling pathways, including insulin/IGF-1 and Wnt, and the activity of multiple ion channels. Klotho protein protects cells and tissues from oxidative stress. Understanding of Klotho protein function is expected to provide new insights into the molecular basis for aging, phosphate/vitamin D metabolism, cancer and stem cell biology.
Form	Liquid. 0.2µm-filtered solution in PBS.
Molecular Mass	~110kDa (SDS-PAGE)
Purity	≥95% (SDS-PAGE)
Stability	Working aliquots are stable for up to 3 months when stored at -20°C.

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Storage	Short Term Storage: +4°C; Long Term Storage: -20°C. After opening, prepare aliquots and store at -20°C. Avoid freeze/thaw cycles.
Concentration	~0.15mg/ml
GENE INFORMATION	
Gene Name	KL klotho [Homo sapiens]
Official Symbol	KL
Synonyms	KL; klotho;
Gene ID	9365
mRNA Refseq	NM_004795
Protein Refseq	NP_004786
UniProt ID	Q9UEF7
Chromosome Location	13q12
Pathway	Ascorbate biosynthesis, animals, glucose-1P => ascorbate, organism-specific biosystem; Ascorbate biosynthesis, animals, glucose-1P => ascorbate, conserved biosystem; Downstream signaling of activated FGFR, organism-specific biosystem; Endocrine and other factor-regulated calcium reabsorption, organism-specific biosystem; Endocrine and other factor-regulated calcium reabsorption, conserved biosystem;

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Function

beta-glucosidase activity; beta-glucuronidase activity; cation binding; fibroblast growth factor binding; fibroblast growth factor receptor binding; hormone activity; signal transducer activity; vitamin D binding;

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