

Active Recombinant Human Klotho Beta, His-tagged

Cat. No. KLB-5671H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human KLB protein was expressed in Murine myeloma cell line with a C-terminal 10-His tag. Phe53-Leu997.
Species	Human
Source	Mammalian Cells
Protein Length	53-997 a.a.
Description	KLB, a divergent structural member of the glycosidase I superfamily, is expressed primarily in the liver and pancreas, with lower expression in adipose tissue. Like Klotho, KLB facilitates binding between FGF19 subfamily members and their receptors via formation of a ternary complex. The KLB mediated interaction of human FGF19 (mouse FGF15) with FGF Receptor 4 in the liver negatively regulates bile acid synthesis by controlling the secretion of two key bile acid synthase genes, Cyp7a1 and Cyp8b1.
Form	Supplied as a 0.2 µm filtered solution in PBS, Glycerol and EDTA.
N-terminal Sequence	Phe53
Molecular Weight	110 kDa
Activity	Measured by its binding ability in a functional ELISA. When 2 µg/mL (100 µL/well) of rhKLB was immobilized onto Ms x hKLB coated plate, the concentration of rhFGF-21

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that produces 50% of the optimal binding response was found to be approximately 3-18 ng/mL.

Endotoxin Level <1.0 EU per 1 µg of the protein by the LAL method.

SDS-PAGE 126 kDa, reducing conditions.

Purity >95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after opening.

GENE INFORMATION

Gene Name [KLB klotho beta \[Homosapiens \]](#)

Official Symbol [KLB](#)

Synonyms KLB; klotho beta; BKL; MGC142213; beta-klotho; betaKlotho; klotho beta like; klotho beta-like protein; EC 3.2.18; OTTHUMP00000158728

Gene ID [152831](#)

mRNA Refseq [NM_175737](#)

Protein Refseq [NP_783864](#)

MIM [611135](#)

UniProt ID [Q86Z14](#)

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Chromosome Location	4p14
Pathway	Downstream signaling of activated FGFR; FGF signaling pat; FGFR ligand binding and activation; FRS2-mediated cascade; IRS-mediated signalling; IRS-related events; Insulin receptor signalling cascade; Klotho-mediated ligand binding; Negativeregulation of FGFR signaling; PI-3K cascade; PI3K Cascade; PhospholipaseC-mediated cascade; SHC-mediated cascade; Signal Transduction; Signaling byFGFR
Function	catalytic activity; cation binding; fibroblast growth factor binding; hydrolase activity

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