

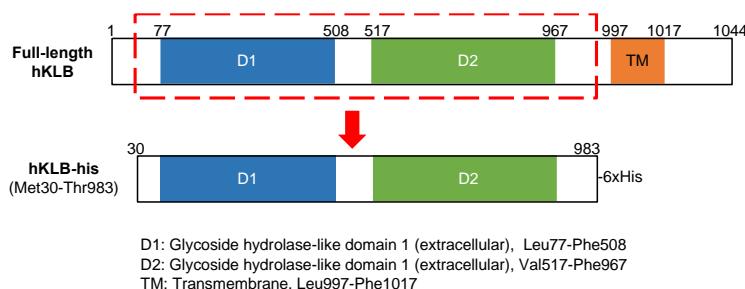


## Human $\beta$ -Klotho (Human sKLB)

<b>Origin:</b>	Recombinant	<b>Cat. No.:</b>	41C071
<b>Tag:</b>	C-terminal 6xHis	<b>Size:</b>	0.1 mg
<b>Source:</b>	<i>Human Embryonic Kidney Cells 293</i>	<b>Purity:</b>	>95%
<b>Synonyms:</b>	Klotho $\beta$ , KLB, BKL	<b>Species:</b>	Human

### Description

Expressed in HEK293 cells with total 960 AA (30-983 AA). Mw: 110.2 KDa (calculated). C-terminal 6xHis-tag, 6 extra AA (highlighted).



**Recombinant antigen for research use or manufacturing only.**

### Introduction to the Molecule

Human beta-klotho ( $\beta$ -Klotho) is a single-pass transmembrane protein that belongs to the klotho family, which also includes  $\alpha$ -klotho and  $\gamma$ -klotho.  $\beta$ -Klotho is encoded by the KLB gene and is primarily expressed in the liver, white adipose tissue, brain, and other organs. It plays a crucial role in the activation of fibroblast growth factor (FGF) signaling pathways, specifically FGF19 and FGF21, by forming a complex with FGF receptors (FGFRs). Human beta-klotho is a multifunctional protein that plays a critical role in metabolism, anti-aging processes, tumor suppression, and neuroprotection by modulating FGF signaling pathways.

### Amino Acid Sequence

MSNGGLQRSVILSALILLRAVTGFGSGDGRAIWSKNPNFTPVNESQLFLYDTFPKNFFWGIGTGALQ  
VEGSWKKDGKGPSIWDHFIHTHLKNVSSTNGSSDSYIFLEKDLSALDFIGVSFYQFSISWPRLFPD  
GIVTVANAKGLQYYSTLLDALVLRNIEPIVTLYHWDLPLALQEKYGGWKNDTIIDIFNDYATYCFQM  
FGDRVVKYWITIHNPYLVAWHGYGTGMHAPGEKGNLAAVYTVGHNLKAHSKVWHNYNTHFRPHQ  
KGWLSTITLGSHWIEPNRSENTMDIFKCQQSMVSVLGFANPIHGDGDYPEGMRKKLFSVLPIFSE  
AEKHEMRGTADFFAFSGPNNFKPLNTMAKMGNVSLNREALNWIKLEYNNPRILIAENGWFTDS  
RVKTEDTTAIYMMKNFLSQLQAIRLDEIRVFGYTAWSLLDGFEWQDAYTIRRGLFYVDFNSKQKE  
RKPSSAHYYKQIIRENGFSLKESTPDVQGQPCDFSWGVTESVLKPESVASSPQFSDPHLYVWN  
ATGNRLLHRVEGVRLKTRPAQCTDFVNICKQLEMLARMKVTHYRFALDWASVLPGNLSAVNRQA  
LRYYRCVVSEGKLGISAMVTLYYPTHAHGLPEPLLHADGWLPNSTAEAFQAYAGLCFQELGDLVK  
LWITINEPNRLSDIYNRSGNDTYGAAHNLLVAHALAWRLYDRQFRPSQRGAWSLHADWAEPAN





PYADSHWRAAERFLQFEI AWF APLFKTGDP AAMREYIASKHRRGLSSSALPRLTEAERRLLKGTV  
DFCALNHFTTRFVMHEQLAGSRYDSDRDIQFLQDITRLSSPTRLAVIPWGVRKLLRWVRRNYGDM  
DIYTASGIDDQALED禄LRKYYLGKYLQEVLKAYLIDKVRIKGYYAFKLAEEKSKPRFGFFTSDKA  
KSSIQFYNKVISSRGFPFENSSSRCSTQENT**HHHHHH**

### Applications

Cell culture, animal studies, ELISA and Western blotting.

### Endotoxin Level

<0.2 EU/ug

### Formulation

Lyophilized at 1 mg/mL in NaCl 300mM, KCl 2.7mM, Na<sub>2</sub>HPO<sub>4</sub> 10mM, KH<sub>2</sub>PO<sub>4</sub> 1.8mM, pH 7.4.

### Storage

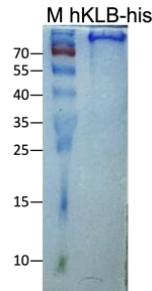
Store lyophilized protein at -20°C. Aliquot reconstituted protein and store at -80°C. Avoid repeated freezing/thawing cycles.

### Quality Control Test

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

### SDS-PAGE Gel



### Contact Us

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