

Synonyms

betaKlotho, beta-klotho, BKL, KLB, klotho beta like, klotho beta-like protein

Source

Cynomolgus / Rhesus macaque Klotho beta Protein, His Tag (KLB-R52H8) is expressed from human 293 cells (HEK293). It contains AA Phe 53 - Leu 997 (Accession # [G7MSR8-1](#)). In the region Phe 53 - Leu 997, the amino acid sequences of Cynomolgus and Rhesus macaque Klotho beta are identical.

Predicted N-terminus: Phe 53

Molecular Characterization

KLB(Phe 53 - Leu 997) G7MSR8-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 110.3 kDa. The protein migrates as 115-130 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Shipping and Storage

This product is shipped at ambient temperature.

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

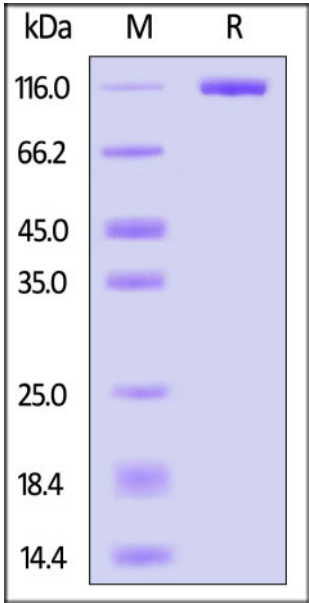
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

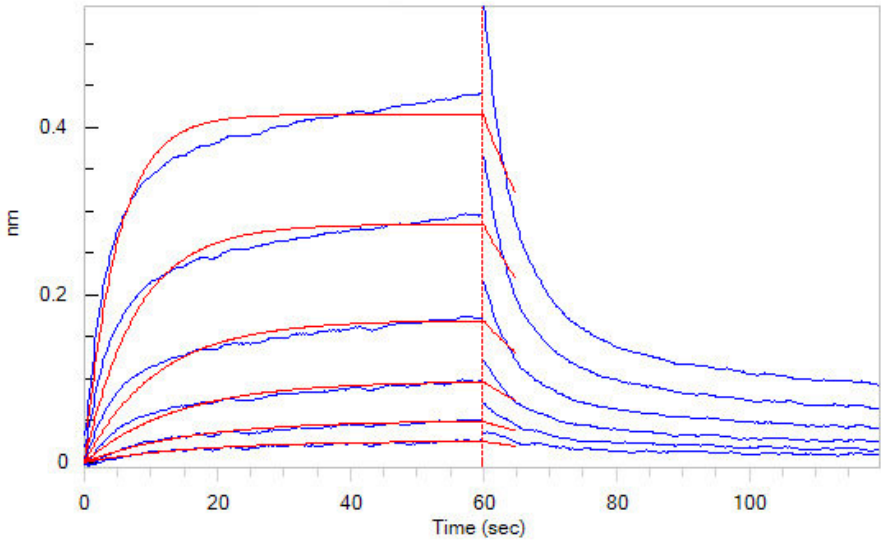
- [QMS\(ISO, GMP\)](#).
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE

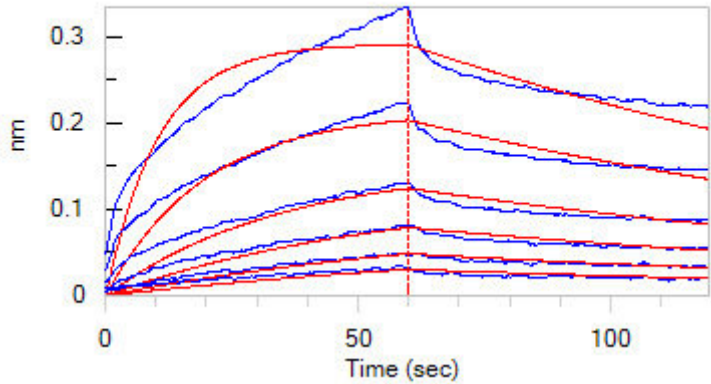


Cynomolgus / Rhesus macaque Klotho beta Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-BLI



Loaded Human FGF R4, Fc Tag (Cat. No. FG4-H5253) on Protein A Biosensor, can bind Cynomolgus / Rhesus macaque Klotho beta Protein, His Tag (Cat. No. KLB-R52H8) with an affinity constant of 0.9 μ M as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Human FGF19, Fc Tag (Cat. No. FG9-H5253) on Protein A Biosensor, can bind Cynomolgus / Rhesus macaque Klotho beta Protein, His Tag (Cat. No. KLB-R52H8) with an affinity constant of 78.5 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

Background

KLB (Klotho Beta) is a Protein Coding gene. Among its related pathways are RET signaling and HIV Life Cycle. GO annotations related to this gene include hydrolase activity, hydrolyzing O-glycosyl compounds and fibroblast growth factor binding. An important paralog of this gene is KL. Klotho Beta is a regulator in multiple metabolic processes, while its role in cancer remains unclear. We found the expression of β Klotho was down-regulated in human hepatocellular carcinoma tissues compared with that in paired adjacent non-tumorous liver tissues. Hepatoma cells also showed decreased expression of β Klotho compared with normal hepatocyte cells. Reintroduction of β Klotho into hepatoma cells inhibited their proliferation.



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