Biotinylated Rhesus macaque Klotho beta / KLB Protein, His Tag, ultra sensitivity (primary amine labeling)

Catalog # KLB-R82H3

Synonym

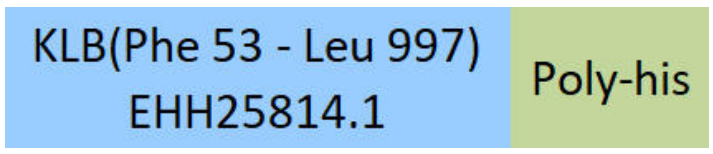
betaKlotho, beta-klotho, BKL, KLB, klotho beta like, klotho beta-like protein

Source

Biotinylated Rhesus macaque Klotho beta Protein, His Tag, primary amine labeling (KLB-R82H3) is expressed from human 293 cells (HEK293). It contains AA Phe 53 - Leu 997 (Accession # EHH25814.1).

Predicted N-terminus: Phe 53

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 110.3 kDa. The protein migrates as 130-150 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A standard biotin reagent (13.5 angstroms) is used in this product.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

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

Purity

>90% 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.

Storage

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

Please avoid repeated freeze-thaw cycles.

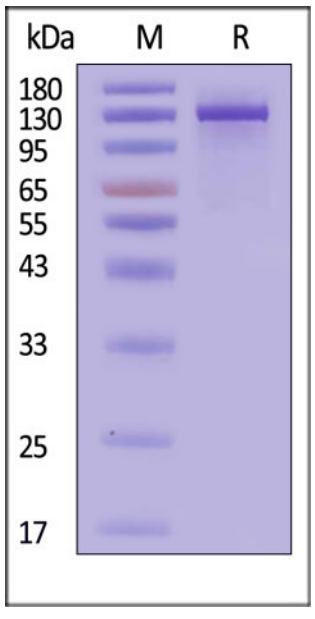
This product is stable after storage at:

- -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

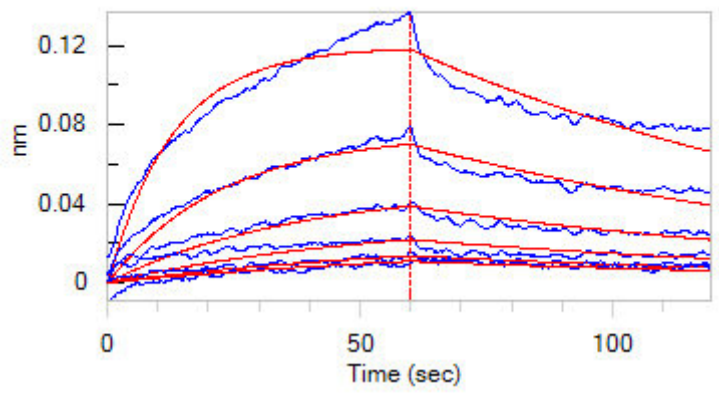
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



Biotinylated Rhesus macaque Klotho beta Protein, His Tag, primary amine labeling on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-BLI



Loaded Human FGF19, Fc Tag (Cat. No. FG9-H5253) on Protein A Biosensor, can bind Biotinylated Rhesus macaque Klotho beta Protein, His Tag, primary amine labeling (Cat. No. KLB-R82H3) with an affinity constant of 0.116 μM 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 βKlotho was down-regulated in human hepatocellular carcinoma tissues compared with that in paired adjacent non-tumourous liver tissues. Hepatoma cells also showed decreased expression of βKlotho compared with normal hepatocyte cells. Reintroduction of βKlotho into hepatoma cells inhibited their proliferation.