

Synonym

ANGPTL3,ANGPT5,ANG-5,Angiopoietin-5,FHBL2

Source

Biotinylated Human Angiopoietin-like 3, His,Avitag(AN3-H82E7) is expressed from human 293 cells (HEK293). It contains AA Ser 17 - Pro 220 (Accession # [Q9Y5C1-1](#)).

Predicted N-terminus: Ser 17

Molecular Characterization

ANGPTL3(Ser 17 - Pro 220) Q9Y5C1-1	Poly-his	Avi
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This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 27.4 kDa. The protein migrates as 30-40 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL 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.

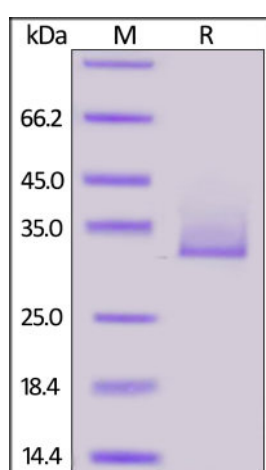
Storage

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:

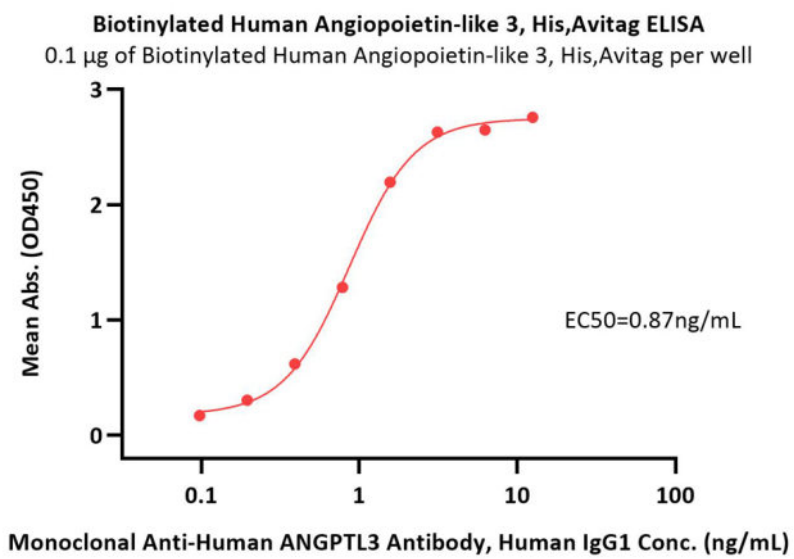
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Biotinylated Human Angiopoietin-like 3, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue.

The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Biotinylated Human Angiopoietin-like 3, His,Avitag (Cat. No. AN3-H82E7) at 1 µg/mL (100 µL/well) on Streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate, can bind Monoclonal Anti-Human ANGPTL3 Antibody, Human IgG1 with a linear range of 0.1-2 ng/mL (QC tested).

Background

Angiopoietin-like protein 3 (ANGPTL3) is also known as Angiopoietin-related protein 3, Angiopoietin-5 (ANGPT5 / ANG-5), is a member of the angiopoietin-like family of secreted factors. ANGPTL3 / ANGPT5 is predominantly expressed in the liver, and has the characteristic structure of angiopoietins, consisting of a signal peptide, N-terminal coiled-coil domain and the C-terminal fibrinogen (FBN)-like domain. The FBN-like domain in angiopoietin-like 3 protein was shown to bind alpha-5/beta-3 integrins, and this binding induced endothelial cell adhesion and migration. This protein may also play a role in the regulation of angiogenesis. Angptl3 also acts as dual inhibitor of lipoprotein lipase (LPL) and endothelial lipase (EL), and increases plasma triglyceride and HDL cholesterol in rodents. ANGPTL3 inhibit endothelial lipase to catalyze HDL-phospholipid and increase HDL-PL levels. Circulating PL-riched HDL particles have high cholesterol efflux abilities.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.