

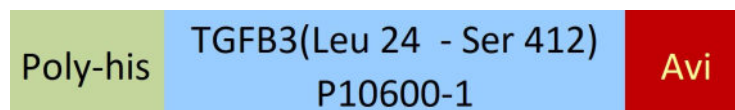
Synonym

TGFB3,ARVD,TGF-beta3

Source

Biotinylated Human Latent TGFB3, His,Avitag(TG3-H82E6) is expressed from human 293 cells (HEK293). It contains AA Leu 24 - Ser 412 (Accession # [P10600-1](#)).

Predicted N-terminus: His

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus and an Avi tag (Avitag™) at the C-terminus. The protein has a calculated MW of 48.4 kDa. The protein migrates as 40-45 kDa and 60 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.

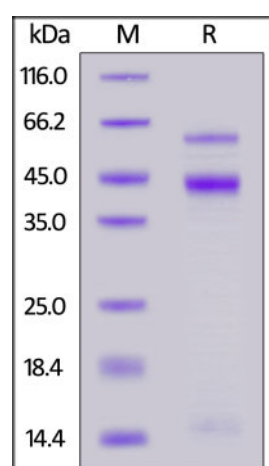
Storage

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

Please avoid repeated freeze-thaw cycles.

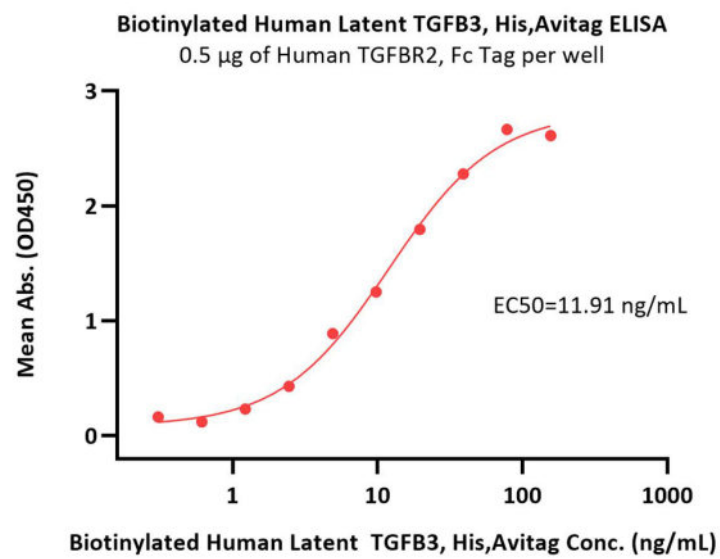
This product is stable after storage at:

- -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 Latent TGFB3, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human TGFBR2, Fc Tag (Cat. No. TG2-H5252) at 5 µg/mL (100 µL/well) can bind Biotinylated Human Latent TGFB3, His,Avitag (Cat. No. TG3-H82E6) with a linear range of 0.3-20 ng/mL (QC tested).

Background

Transforming growth factor beta 3 (TGFB3) is also known as TGF-β3, is a polypeptide member of the transforming growth factor beta superfamily of cytokines. It is a secreted protein that performs many cellular functions, including regulates embryogenesis and cell differentiation and is required in various processes such as secondary palate development. TGF-beta 3 is similar with TGF-beta 1 and -beta 2, act as cellular switches to regulate immune function, cell proliferation, and epithelial-mesenchymal transition. TGF-beta-3 is released from LAP by integrins: integrin-binding results in distortion of the LAP chain and subsequent release of the active TGF-beta-3. Once activated following release of LAP, TGF-beta-3 acts by binding to TGF-beta receptors (TGFBR1 and TGFBR2), which transduce signal.

Clinical and Translational Updates

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