Human Latent TGF-beta 3 / Latent TGFB3 Protein, His Tag

Catalog # TG3-H52H5

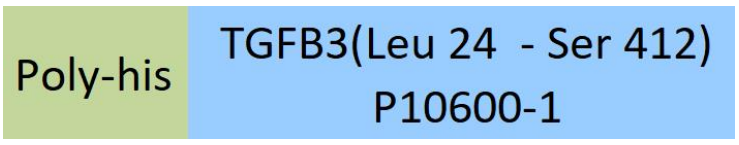
Synonym

TGFB3,ARVD,TGF-beta3

Source

Human Latent TGF-beta 3, His Tag(TG3-H52H5) is expressed from human 293 cells (HEK293). It contains AA Leu 24 - Ser 412 (Accession # P10600-1).

Molecular Characterization



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

The protein has a calculated MW of 46.8 kDa. The protein migrates as 44-47 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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

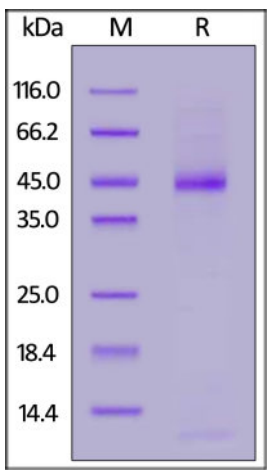
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

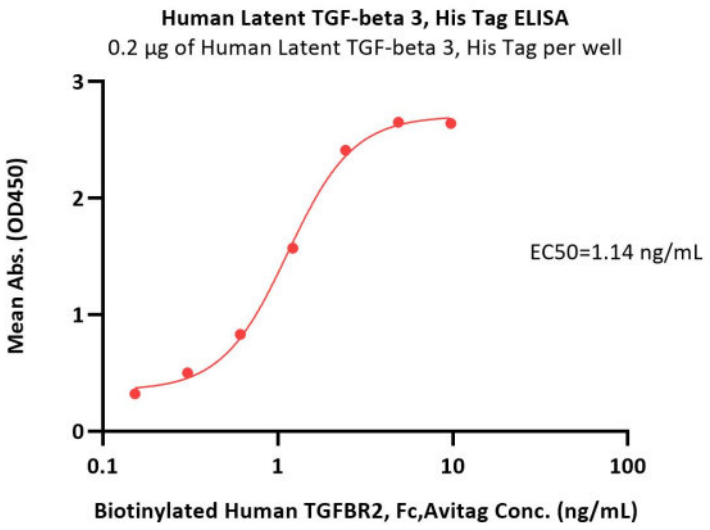
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human Latent TGF-beta 3, His Tag 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 Latent TGF-beta 3, His Tag (Cat. No. TG3-H52H5) at 2 μg/mL (100 μL/well) can bind Biotinylated Human TGFBR2, Fc,Avitag (Cat. No. TG2-H82F6) with a linear range of 0.2-2 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.

Discounts, Gifts, and more!