

Synonym

TGFB3,ARVD,TGF-beta3

Source

Human TGF-beta 3, premium grade(TG3-H5213) is expressed from human 293 cells (HEK293). It contains AA Ala 301 - Ser 412 (Accession # [P10600-1](#)).  
Predicted N-terminus: Ala 301

*It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.*

Molecular Characterization

TGFB3(Ala 301 - Ser 412)  
P10600-1

This protein carries no "tag".

The protein has a calculated MW of 12.7 kDa. The protein migrates as 12 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Sterility

Negative

Mycoplasma

Negative

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM HAC, pH2.8 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

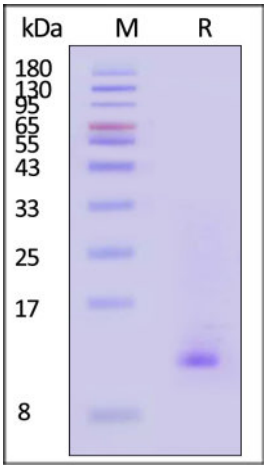
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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

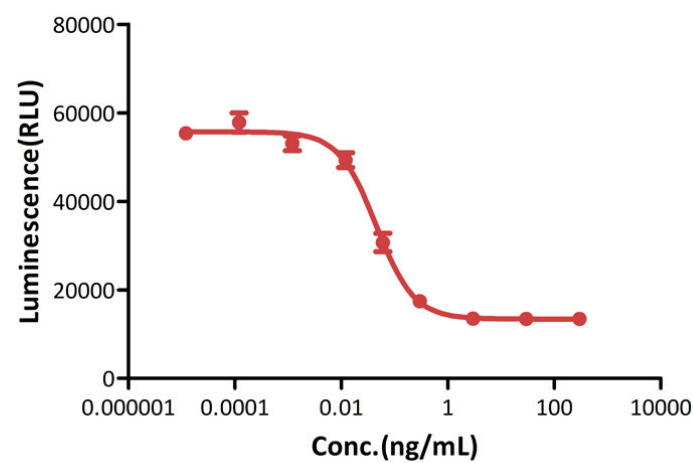


Human TGF-beta 3, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-CELL BASE

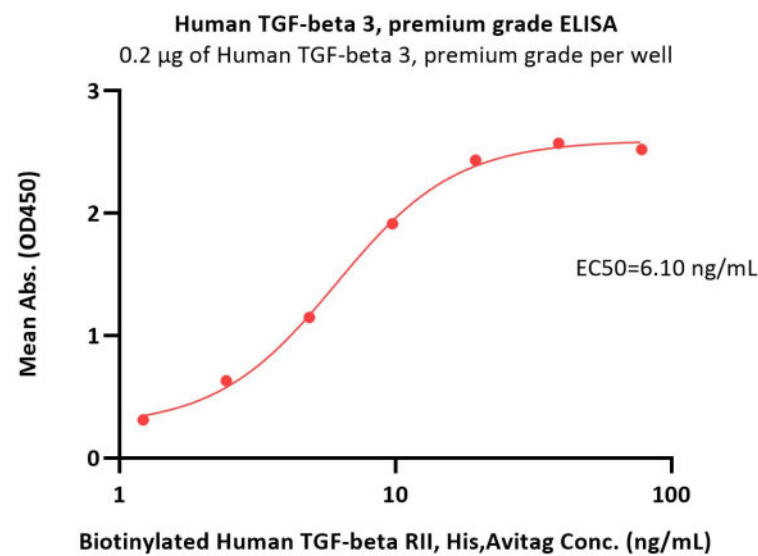


Human TGF-beta 3, premium grade inhibits the IL-4 dependent proliferation of TF-1 cells



Human TGF-beta 3, premium grade (Cat. No. TG3-H5213) inhibits the Human IL-4, premium grade (Cat. No. IL4-H4218) dependent proliferation of TF-1 cells. The specific activity of Human TGF-beta 3, premium grade is > 1.00 x 10<sup>7</sup> IU/mg, which is calibrated against WHO International Standard Transforming Growth Factor-Beta 3 (NIBSC code: 09/234) (Human rDNA derived) (QC tested).

Bioactivity-ELISA



Immobilized Human TGF-beta 3, premium grade (Cat. No. TG3-H5213) at 2 µg/mL (100 µL/well) can bind Biotinylated Human TGF-beta RII, His,Avitag (Cat. No. TG2-H82E4) with a linear range of 1-10 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 (TGFB1 and TGFB2), which transduce signal.

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and more!

