

Synonym

TGFB2,MGC116892,TGFβ2,TGF-beta2

Source

Human TGF-Beta 2, Tag Free (TG2-H4215) is expressed from human 293 cells (HEK293). It contains AA Ala 303 - Ser 414 (Accession # [P61812-1](#)).

Predicted N-terminus: Ala 303

Molecular Characterization

TGFB2(Ala 303 - Ser 414)
P61812-1

This protein carries no "tag".

The protein has a calculated MW of 12.7 kDa. The protein migrates as 13-14 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in TFA and ACN. Normally trehalose is added as protectant before lyophilization.

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.

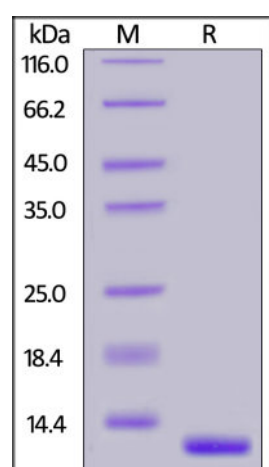
Storage

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:

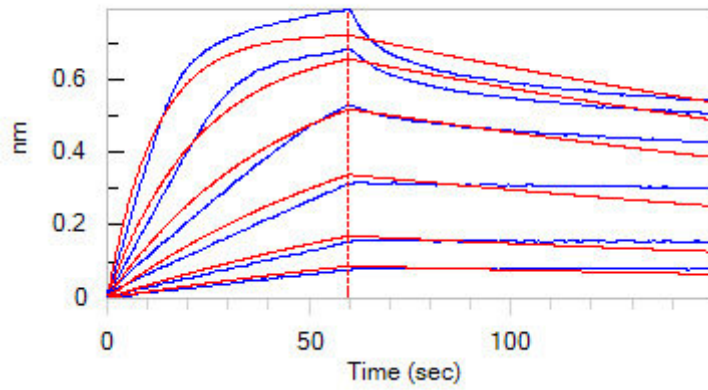
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human TGF-Beta 2, Tag Free on SDS-PAGE under reducing (R) condition.

The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-BLI



Loaded Human TGFBR2, Fc Tag (Cat. No. TG2-H5252) on Protein A Biosensor, can bind Human TGF-Beta 2, Tag Free (Cat. No. TG2-H4215) with an affinity constant of 8.09 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

Background

Transforming growth factor beta 2 (TGFB2) is also known as TGF- β 2, G-TSF, TGFB. is a polypeptide member of the transforming growth factor beta superfamily of cytokines. It is a secreted protein that performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and apoptosis. The TGFB2 protein helps control the growth and division (proliferation) of cells, the process by which cells mature to carry out specific functions (differentiation), cell movement (motility), and the self-destruction of cells (apoptosis). The TGFB2 protein can inhibit the T cell growth by IL-2-dependent. and can inhibit immune surveillance during tumor development, the protein promoting tumor growth with an autocrine manner. TGF- β 2 can affect the viability of killer cells and reduce the expression of IL-2, IL-6, IL-10, IFN- γ and other cytokines. TGFB2 plays an important role in controlling the immune system, and shows different activities on different types of cell, or cells at different developmental stages.

References

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