Human Latent TGF-beta 2 / TGFB2 Protein, His Tag

Catalog # TG2-H5243

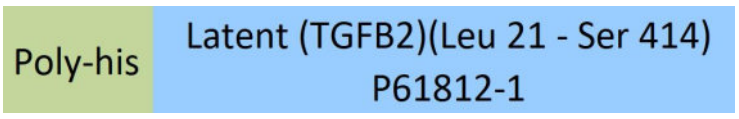
Synonym

Latent TGFB2,MGC116892,TGFβ2,TGF-beta2

Source

Human Latent TGFB2, His Tag(TG2-H5243) is expressed from human 293 cells (HEK293). It contains AA Leu 21 - Ser 414 (Accession # P61812-1).

Molecular Characterization



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

The protein has a calculated MW of 47.6 kDa. The protein migrates as 12 kDa and 40-50 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

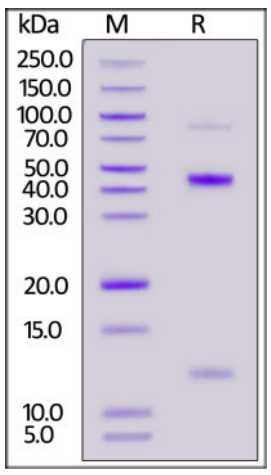
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

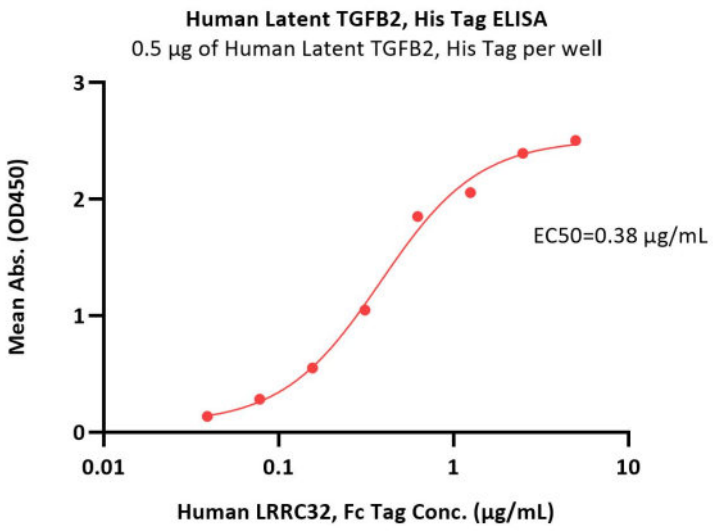
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

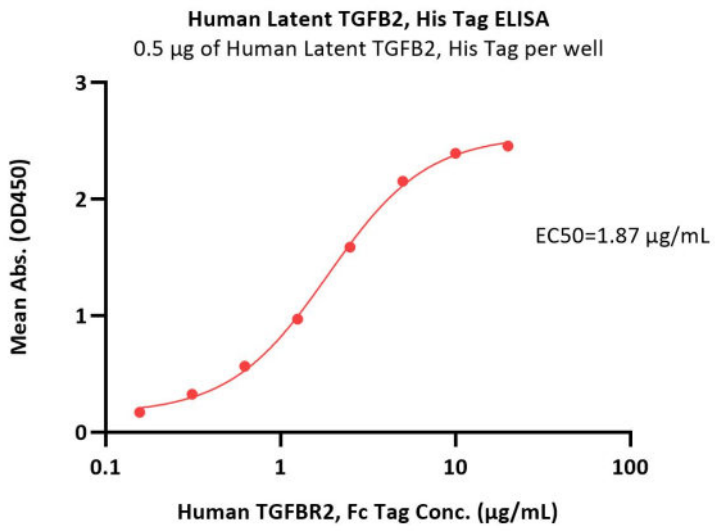


Human Latent TGFB2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human Latent TGFB2, His Tag (Cat. No. TG2-H5243) at 5 μg/mL (100 μL/well) can bind Human LRRC32, Fc Tag (Cat. No. LR2-H5256) with a linear range of 0.039-0.625 μg/mL (QC tested).



Immobilized Human Latent TGFB2, His Tag (Cat. No. TG2-H5243) at 5 μg/mL (100 μL/well) can bind Human TGFBR2, Fc Tag (Cat. No. TG2-H5252) with a linear range of 0.156-2.5 μg/mL (Routinely tested).

Background

Transforming growth factor beta 2 (TGFB2) is also known as TGF-β2, 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-β2 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.

Clinical and Translational Updates