

RP00161

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Recombinant Human Latent TGF-beta 1 (C33S) Protein

Catalog No.: RP00161

Recombinant

3 Publications

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	7040	P01137

Tags

N-His

Synonyms

TGFB1; CED; DPD1; LAP; TGFB;
TGFBeta; transforming growth factor
beta-1;TGF-beta
1;CED;DPD1;LAP;TGFB;TGFBeta;TGF-β

Product Information

Source

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile 4 mM HCl. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Purification

≥ 95 % as determined by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Background

Basic Information

Description

Recombinant Human Latent TGF-beta 1 (C33S) Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Leu30-Ser390(C33S)) of human TGF-beta 1 (Accession #NP_000651.3) fused with an 8×His tag at the N-terminus.

Bio-Activity

1. Measured by its ability to inhibit cell proliferation of TF-1 human erythroleukemic cells. The ED₅₀ for this effect is typically 0.5-2 ng/mL, corresponding to a specific activity of 5.0×10⁵~2.0×10⁶ units/mg. | 2. Measured by its binding ability in a functional ELISA. Immobilized recombinant human TGFB1 at 2 μg/mL (100 μL/well) can bind recombinant human TGFBR2 with a linear range of 1-5 ng/mL. | 3. Measured by its ability to inhibit the IL-4 (Catalog: RP01161)-dependent proliferation of HT-2 mouse T cells. The ED₅₀ for this effect is 9.75-39 ng/mL, corresponding to a specific activity of 2.6×10⁴~1.0×10⁵ units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature. Liquid proteins are shipped at frozen temperature with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

Store at -20°C
Avoid repeated freeze/thaw cycles.

Reconstitution

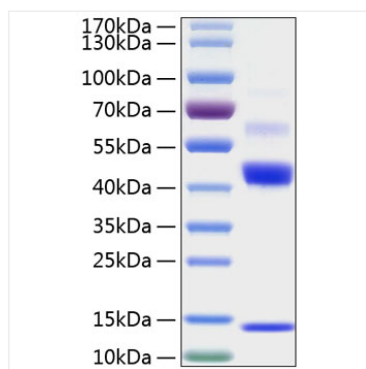
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Contact

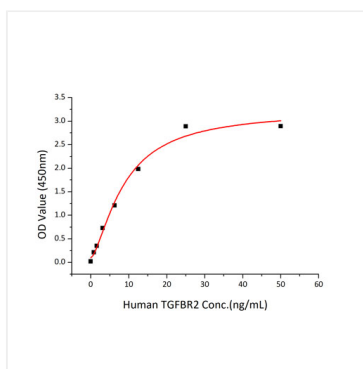


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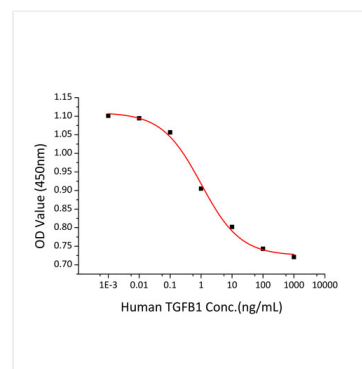
Validation Data



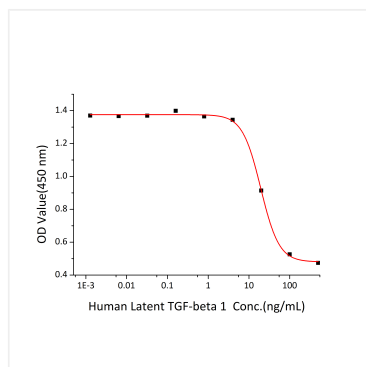
Recombinant Human Latent TGF-beta 1 (C33S) Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant human TGF-beta 1 at 2 µg/mL (100 µL/well) can bind recombinant human TGF-beta 2 with a linear range of 1-5 ng/mL.



Recombinant Human TGF-beta 1 inhibits cell proliferation of TF-1 human erythroleukemic cells. The ED₅₀ for this effect is typically 0.5-2 ng/mL, corresponding to a specific activity of $5.0 \times 10^5 \sim 2.0 \times 10^6$ units/mg.



Recombinant Human TGF-beta 1 inhibit the IL-4(Catalog: RP01161)-dependent proliferation of HT-2 mouse T cells. The ED₅₀ for this effect is 9.75-39 ng/mL, corresponding to a specific activity of $2.6 \times 10^4 \sim 1.0 \times 10^5$ units/mg.