

# Recombinant Human Latent TGF-beta 1 (C33S) Protein

Catalog No.: RP00161

Recombinant

1 Publications

## Sequence Information

Species	Gene ID	Swiss Prot
Human	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	Purification
HEK293 cells	> 95% by SDS-PAGE.

Calculated MW	Observed MW
42.09 kDa	13 kDa, 42 kDa, 60 kDa

### 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.

### Reconstitution

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.

## Contact

☎ | 400-999-6126

✉ | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

🌐 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## 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 ED<sub>50</sub> for this effect is typically 0.5-2 ng/mL, corresponding to a specific activity of 5.0×10<sup>5</sup>~2.0×10<sup>6</sup> 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 ED<sub>50</sub> for this effect is 9.75-39 ng/mL, corresponding to a specific activity of 2.6×10<sup>4</sup>~1.0×10<sup>5</sup> units/mg.

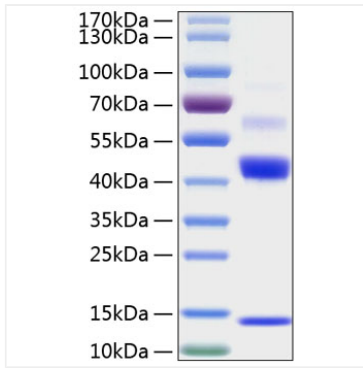
#### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

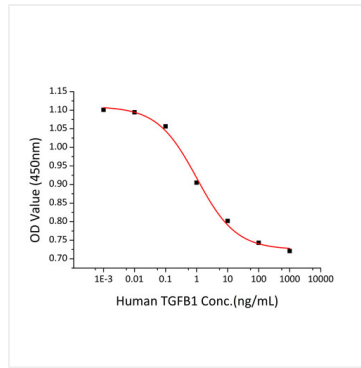
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

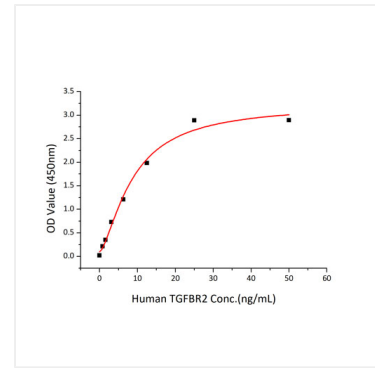
## Validation Data



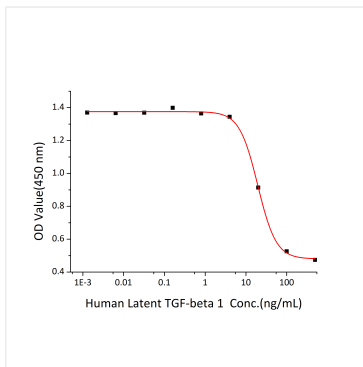
Active Recombinant Human TGF-beta 1(C33S) Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 13&42&60kDa.



Recombinant Human TGF-beta 1 inhibits cell proliferation of TF-1 human erythroleukemic cells. The ED<sub>50</sub> 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.



Immobilized recombinant human TGFβ1 at 2 μg/mL (100 μL/well) can bind recombinant human TGFβR2 with a linear range of 1-5 ng/mL.



Recombinant Human TGF-beta 1 inhibit the IL-4(Catalog: RP01161)-dependent proliferation of HT-2 mouse T cells. The ED<sub>50</sub> 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.