

# Recombinant Human Latent TGF-beta 2 Protein

**Catalog No.:** RP03502 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	7042	P61812-1

### Tags

N-His

### Synonyms

TGFB2; Transforming growth factor beta-2 proprotein; Cetermin; Glioblastoma-derived T-cell suppressor factor; G-TSF; Cleaved into: Latency-associated peptide; LAP; Transforming growth factor beta-2; TGF-beta-2

## Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by Tris-Bis PAGE; ≥ 95 % as determined by HPLC.

Calculated MW	Observed MW
46.6 kDa	40-60 kDa, 12-13 kDa

### Endotoxin

&lt; 1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. 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.

## Background

This protein belongs a member of the transforming growth factor beta (TGFB) family of cytokines, which are multifunctional peptides that regulate proliferation, differentiation, adhesion, migration, and other functions in many cell types by transducing their signal through combinations of transmembrane type I and type II receptors (TGFBRI and TGFBRII) and their downstream effectors, the SMAD proteins. Disruption of the TGFB/SMAD pathway has been implicated in a variety of human cancers. The encoded protein is secreted and has suppressive effects of interleukin-2 dependent T-cell growth. Translocation t(1;7)(q41;p21) between this gene and HDAC9 is associated with Peters' anomaly, a congenital defect of the anterior chamber of the eye. The knockout mice lacking this gene show perinatal mortality and a wide range of developmental, including cardiac, defects. Alternatively spliced transcript variants encoding different isoforms have been identified.

## Basic Information

### Description

Recombinant Human Latent TGF-beta 2 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Leu21-Ser414) of Human Latent TGF-beta 2 (Accession #NP\_003229.1) fused with His tag at the N-terminus.

### Bio-Activity

Human TGF-beta RII, hFc Tag captured on CM5 Chip via Protein A can bind Human Latent TGF beta 2, His Tag with an affinity constant of 2.21 μM as determined in SPR assay


### 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.

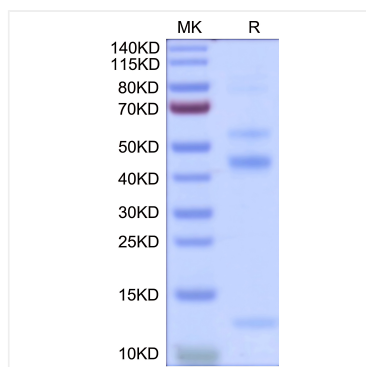
## Contact

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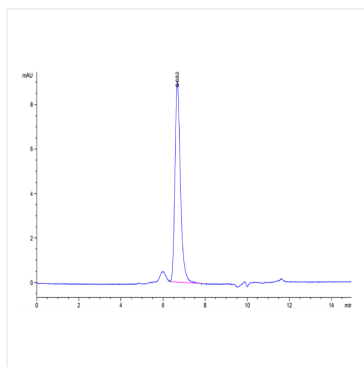
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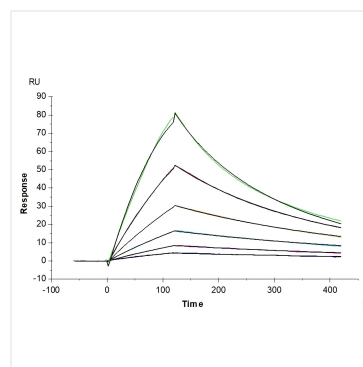
## Validation Data



Recombinant Human Latent TGF-beta 2 Protein was determined by Bis-Tris PAGE under reducing conditions with Coomassie Blue.



Recombinant Human Latent TGF-beta 2 Protein is greater than 95% as determined by SEC-HPLC.



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