

# Human Latent TGF beta 1/TGFB1 Protein

Cat. No. TG1-HM401

## Description

<b>Source</b>	Recombinant Human Latent TGF beta 1/TGFB1 Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Leu30-Ser390 (C33S).
<b>Accession</b>	P01137
<b>Molecular Weight</b>	The protein has a predicted MW of 44.2 kDa. Due to glycosylation, the protein migrates to 40-50 kDa (LAP) / 13-15 kDa (Mature TGF Beta 1) based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Latent TGF beta 1 cDNA encodes a 390 amino acid precursor that contains a 29 aa signal peptide and a 361 aa proprotein. A furinlike convertase processes the proprotein to generate an Nterminal 249 aa latencyassociated peptide (LAP) and a Cterminal 112 aa mature TGF beta 1. Disulfidelinked homodimers of LAP and TGF beta 1 remain noncovalently associated after secretion, forming the small latent TGF beta 1 complex.

## Assay Data

### Bis-Tris PAGE

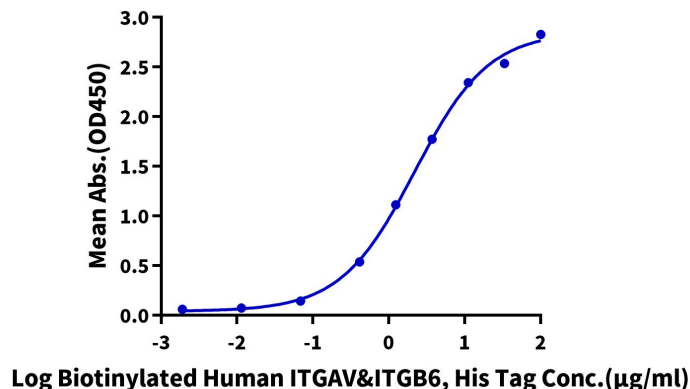


Human Latent TGF beta 1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

Assay Data

**Human Latent TGF beta 1, His Tag ELISA**

0.2µg Human Latent TGF beta 1, His Tag Per Well

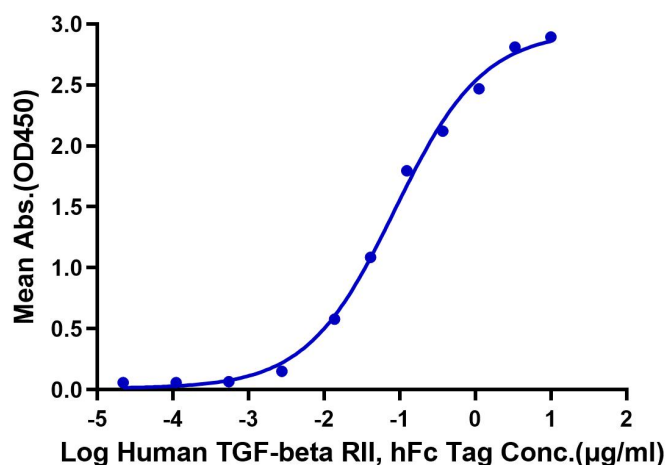


Immobilized Human Latent TGF beta 1, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human ITGAV&ITGB6, His Tag with the EC50 of 2.2µg/ml determined by ELISA (QC Test).

ELISA Data

**Human Latent TGF beta 1, His Tag ELISA**

0.05µg Human Latent TGF beta 1, His Tag Per Well

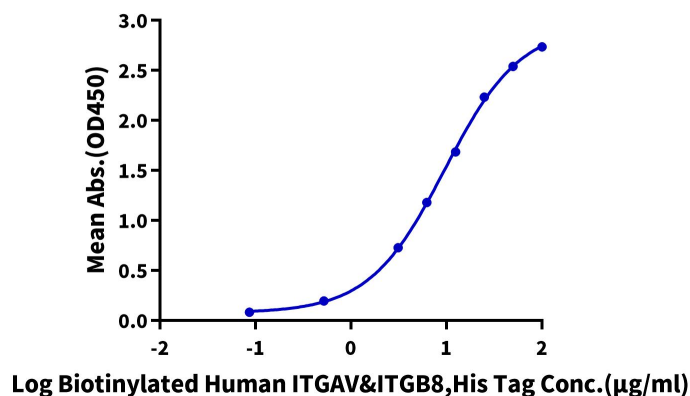


Immobilized Human Latent TGF beta 1, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Human TGF-beta RII, hFc Tag with the EC50 of 86.1ng/ml determined by ELISA.

ELISA Data

**Human Latent TGF beta 1, His Tag ELISA**

0.5µg Human Latent TGF beta 1, HisTag Per Well



Immobilized Human Latent TGF beta 1, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human ITGAV&ITGB8, His Tag with the EC50 of 9.62ug/ml determined by ELISA.