

Human Latent TGF beta 1/TGFB1 Protein

Cat. No. TG1-HM401

Description

Source	Recombinant Human Latent TGF beta 1/TGFB1 Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Leu30-Ser390 (C33S).
Accession	P01137
Molecular Weight	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 Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

Formulation and Storage

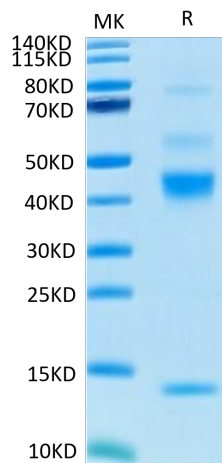
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days 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

Tris-Bis PAGE

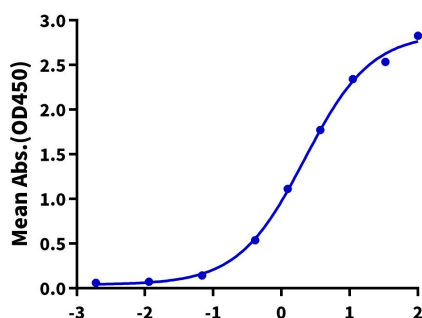


Human Latent TGF beta 1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

ELISA Data

Human Latent TGF beta 1, His Tag ELISA

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



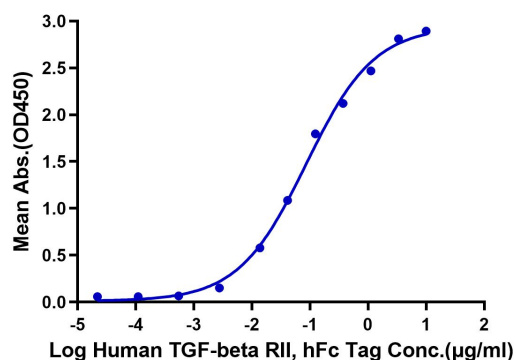
Immobilized Human Latent TGF beta 1, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human ITGAV&ITGB6, His Tag with the EC50 of 2.2µg/ml determined by ELISA (QC Test).

Log Biotinylated Human ITGAV&ITGB6, His Tag Conc.(µg/ml)

Assay Data

ELISA Data

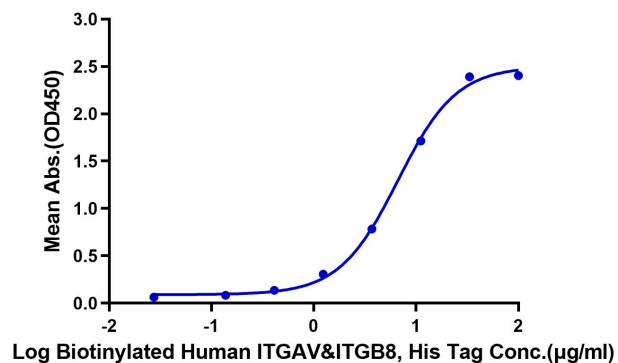
Human Latent TGF beta 1, His Tag ELISA
0.05µg Human Latent TGF beta 1, His Tag Per Well



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, His Tag 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 6.6µg/ml determined by ELISA.