

Biotinylated Human Latent TGF beta 1/TGFB1 Protein

Cat. No. TG1-HM401B

Description

Source	Recombinant Biotinylated Human Latent TGF beta 1/TGFB1 Protein is expressed from HEK293 with His tag and Avi 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 Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage

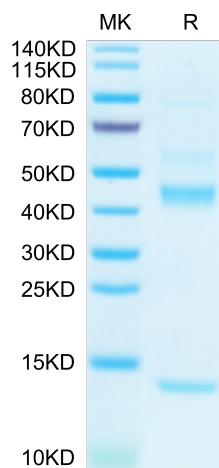
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

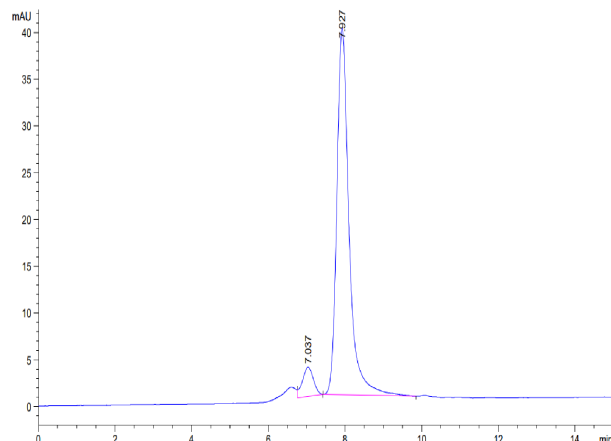
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



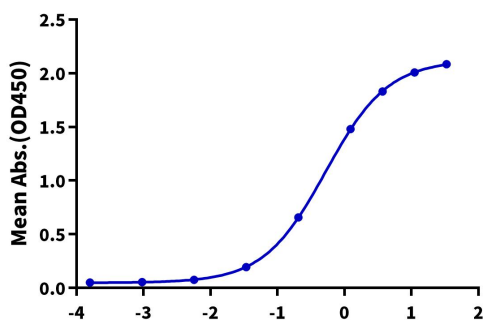
The purity of Biotinylated Human Latent TGF beta 1 is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

Biotinylated Human Latent TGF beta 1, His Tag ELISA

0.1µg Human ITGAV&ITGB6, His Tag Per Well



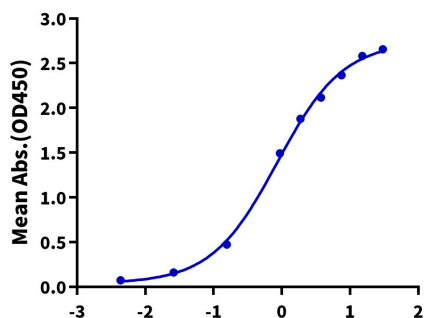
Log Biotinylated Human Latent TGF beta 1, His Tag Conc.(µg/ml)

Immobilized Human ITGAV&ITGB6, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Human Latent TGF beta 1, His Tag with the EC50 of 0.53µg/ml determined by ELISA (QC Test).

ELISA Data

Biotinylated Human Latent TGF beta 1, His Tag ELISA

0.5µg Human ITGAV&ITGB8, His Tag Per Well



Log Biotinylated Human Latent TGF beta 1, His Tag Conc.(µg/ml)

Immobilized Human ITGAV&ITGB8, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human Latent TGF beta 1, His Tag with the EC50 of 0.85µg/ml determined by ELISA.