

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 Expi293 with His tag and Avi tag at the N-terminal. 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 (LAP) /13-15 (Mature TGF beta 1) kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 93% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/ml is recommended (usually we use 1mg/ml solution for lyophilization). Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please avoid 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

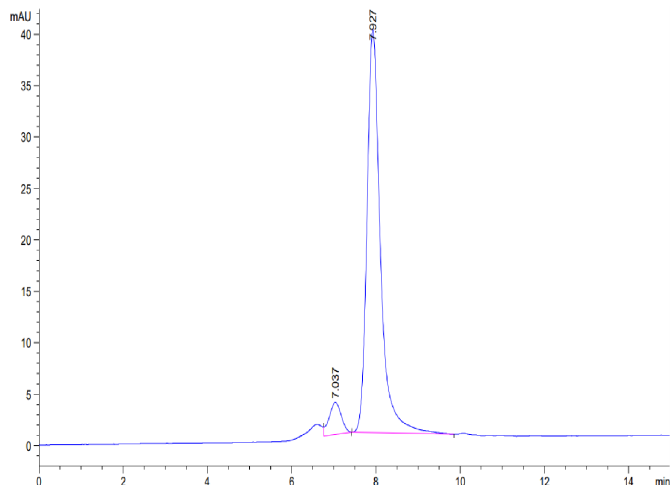
Tris-Bis PAGE



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

SEC-HPLC

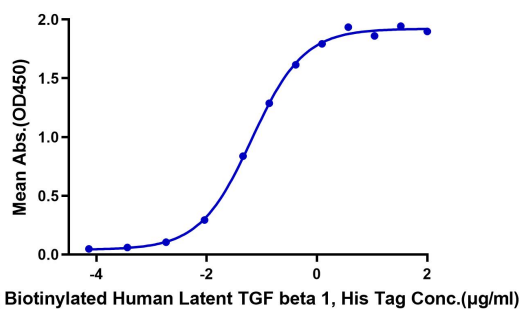
Assay Data



The purity of Biotinylated Human Latent TGF beta 1 is greater than 93% as determined by SEC-HPLC.

ELISA Data

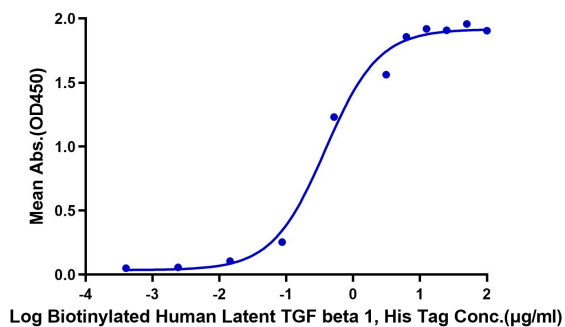
Biotinylated Human Latent TGF beta 1, His Tag ELISA
0.1µg Human ITGAV&ITGB6, His Tag Per Well



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 65.7ng/ml determined by ELISA.

ELISA Data

Biotinylated Human Latent TGF beta 1, His Tag ELISA
0.5µg Human ITGAV&ITGB8, His Tag Per Well



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 0.39µg/ml determined by ELISA.