

Human GARP&Latent TGF Beta 2 Complex Protein

Cat. No. GAT-HM402

Description

Source	Recombinant Human GARP&Latent TGF Beta 2 Complex Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains His20-Leu628(GARP)&Leu21-Ser414(Latent TGF Beta 2).
Accession	Q14392(GARP)&P61812-1(Latent TGF Beta 2)
Molecular Weight	The protein has a predicted MW of 70.3 kDa(GARP)&45.53 kDa(Latent TGF Beta 2). Due to enzyme lysis and glycosylation, the protein migrates to 72-77 kDa(GARP)&13 kDa&46-48 kDa(Latent TGF Beta 2) based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% 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

GARP&Latent TGF Beta is a complex found on surface of many types of cells. In Tregs, GARP is involved in TCR-mediated activation of Latent TGF-β and thus promoting secretion and activation of TGF-β. Integrin αβ8 on the surface of immune cells and other cells recognizes RGD in LAP, resulting in the release of mature TGF-β from the TGF-β&GARP complex.

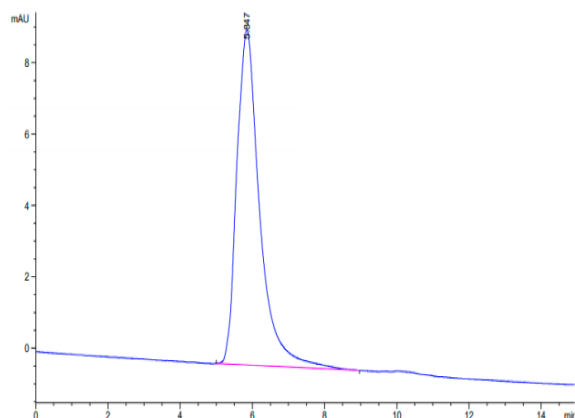
Assay Data

Bis-Tris PAGE



Human GARP&Latent TGF Beta 2 Complex on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

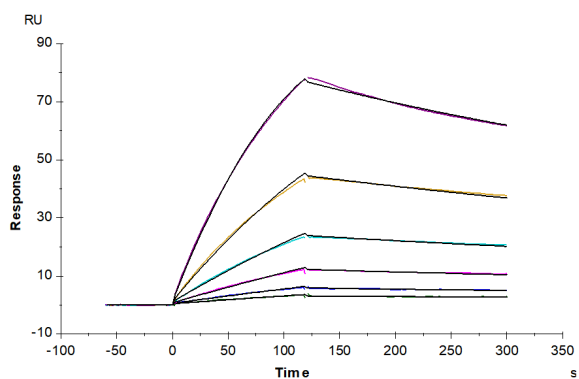
SEC-HPLC



The purity of Human GARP&Latent TGF Beta 2 Complex is greater than 95% as determined by SEC-HPLC.

Assay Data

SPR Data



Human TGF-beta RII, hFc Tag captured on CM5 Chip via Protein A can bind Human GARP&Latent TGF Beta 2, His Tag with an affinity constant of 8.30 nM as determined in SPR assay (Biacore T200).