

Human TGF-beta RII/TGFBR2 Protein

Cat. No. TGF-HM5R2

Description

Source	Recombinant Human TGF-beta RII/TGFBR2 Protein is expressed from HEK293 with hFc tag at the N-Terminus. It contains Ile24-Asp159.
Accession	P37173-1
Molecular Weight	The protein has a predicted MW of 44.2 kDa. Due to glycosylation, the protein migrates to 50-68 kDa 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

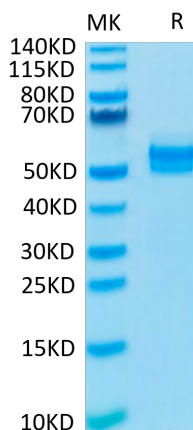
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 24 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

The TGFBR2 gene provides instructions for making a protein called transforming growth factor-beta (TGF-β) receptor type 2. This receptor transmits signals from the cell surface into the cell through a process called signal transduction. Through this type of signaling, the environment outside the cell affects activities inside the cell such as stimulation of cell growth and division.

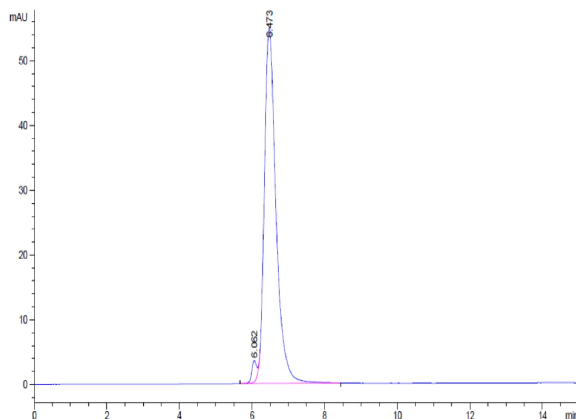
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



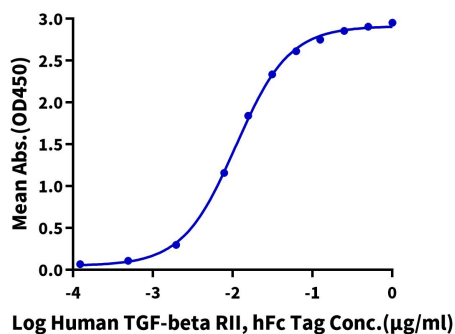
The purity of Human TGF-beta RII is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

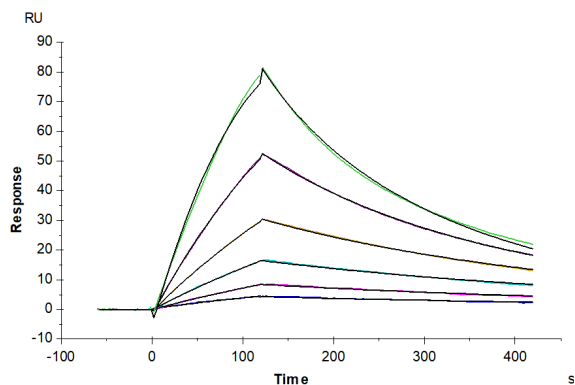
Human TGF-beta RII, hFc Tag ELISA

0.1µg Human Mature TGF beta 1, No Tag Per Well



Immobilized Human Mature TGF beta 1, No Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human TGF-beta RII, hFc Tag with the EC50 of 11.0ng/ml determined by ELISA (QC Test).

SPR Data



Human TGF-beta RII, hFc Tag captured on CM5 Chip via Protein A can bind Human Latent TGF beta 2, His Tag with an affinity constant of 2.21 µM as determined in SPR assay (Biacore T200).