

# Human TGF-beta RII/TGFBR2 Protein, Ultra Low Endotoxin

Cat. No. TGF-HM5R2-UL

## Description

<b>Source</b>	Recombinant Human TGF-beta RII/TGFBR2 Protein is expressed from HEK293 with hFc (IgG1) tag at the N-Terminus. It contains Ile24-Asp159.
<b>Accession</b>	P37173-1
<b>Molecular Weight</b>	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.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-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

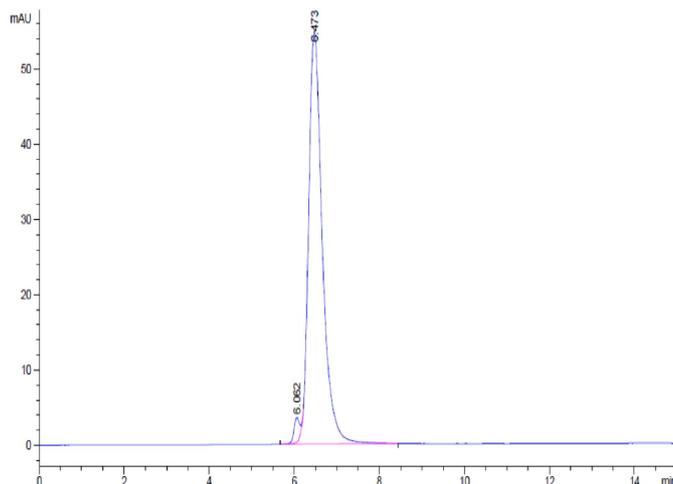
### Bis-Tris PAGE



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

### SEC-HPLC

**Assay Data**

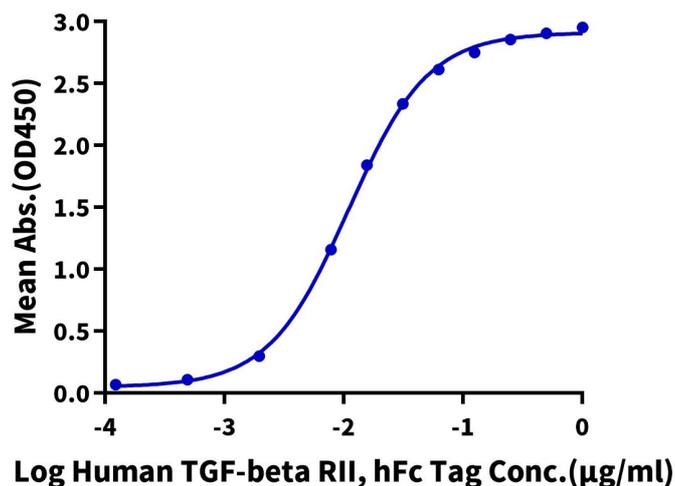


The purity of Human TGF-beta RII is greater than 95% as determined by SEC-HPLC.

**ELISA Data**

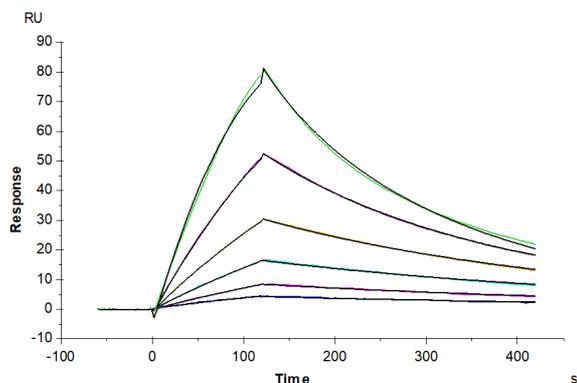
**Human TGF-beta RII, hFc Tag ELISA**

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).

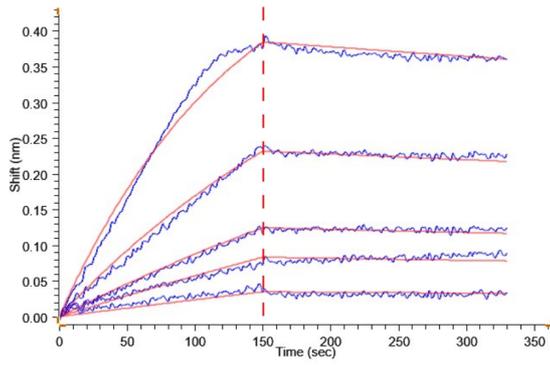
**SPR Data**



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).

**BLI Data**

Assay Data



Loaded Human TGF-beta RII, hFc Tag on ProA-Biosensor can bind Human Mature TGF beta 3, No Tag with an affinity constant of 0.51 nM as determined in BLI assay .