

# Human TGF-beta RII/TGFBR2 Protein

Cat. No. TGF-HM5R2

## Description

<b>Source</b>	Recombinant Human TGF-beta RII/TGFBR2 Protein is expressed from HEK293 with hFc 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 1EU per $\mu$ g by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

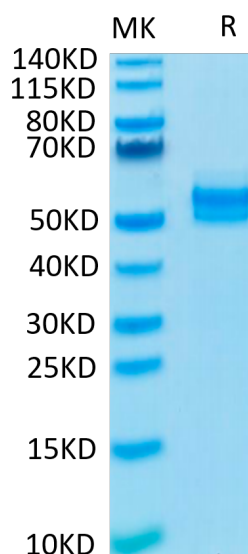
<b>Formulation</b>	Lyophilized from 0.22 $\mu$ m filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu$ g/ml is recommended. Dissolve the lyophilized protein in distilled water.
<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- $\beta$ ) 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

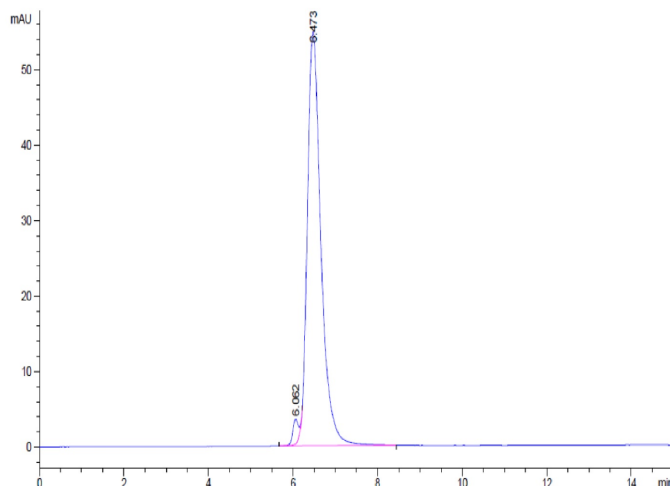
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data

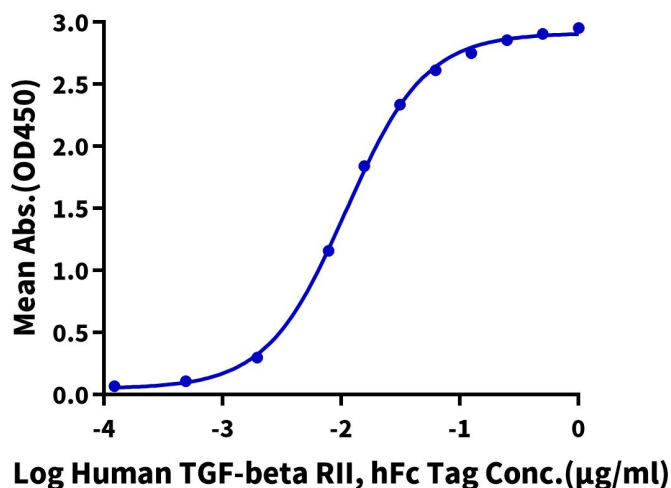


The purity of Human TGF-beta RII is greater than 95% as determined by SEC-HPLC.

ELISA Data

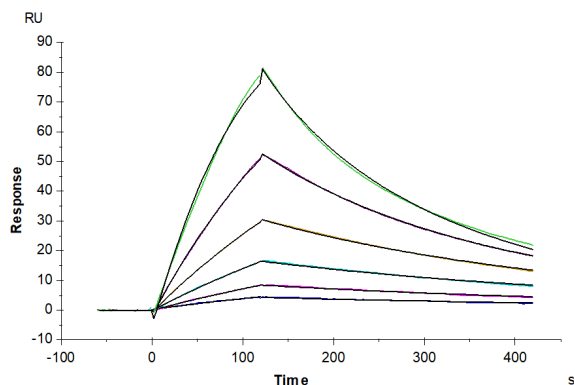
**Human TGF-beta RII, hFc Tag ELISA**

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).