## 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 1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

# Formulation and Storage

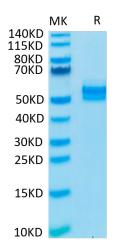
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 24 months as supplied from date of receipt80°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.

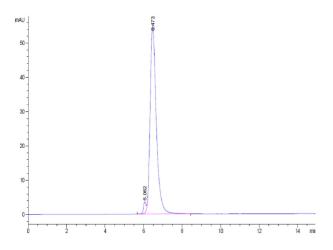
## **Assay Data**

# **Bis-Tris PAGE**



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

## SEC-HPLC



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

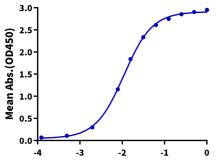
# KAGTUS

## **Assay Data**

### **ELISA Data**

## Human TGF-beta RII, hFc Tag ELISA

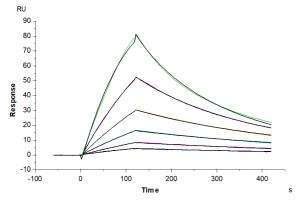
0.1μg Human Mature TGF beta 1, No Tag Per Well



Log Human TGF-beta RII, hFc Tag Conc.(μg/ml)

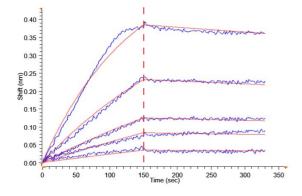
Immobilized Human Mature TGF beta 1, No Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human TGF-beta RII, hFc Tag with the EC50 of 11.0ng/ml determined by ELISA (QC Test).

### **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**



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 (Gator® Prime).