



Datasheet for ABIN6973280

## TGFBR2 Protein (AA 23-159) (His tag,AVI tag,Biotin)



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### 3 Images

#### Overview

Quantity:	200 µg
Target:	TGFBR2
Protein Characteristics:	AA 23-159
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This TGFBR2 protein is labelled with His tag,AVI tag,Biotin.

#### Product Details

Sequence:	AA 23-159
Specificity:	Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.
Characteristics:	Biotinylated Human TGF-beta RII / TGFBR2 Protein, Fc,Avitag™ (MALS verified)
Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

#### Target Details

Target:	TGFBR2
Alternative Name:	TGF-beta RII ( <a href="#">TGFBR2 Products</a> )

## Target Details

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**Background:** TGF-beta receptor type-2 (TGFB2 or TGFR-2) is also known as TGF-beta type II receptor, Transforming growth factor-beta receptor type II, TbetaR-II, TGFβR2, which is a homodimer or heterohexamer, belongs to the protein kinase superfamily, TKL Ser/Thr protein kinase family and TGFβ receptor subfamily. TGFR2 / TGFB2 binds TGF-β1 / TGFβ1 and TGF-β3 / TGFβ3 with high affinity and TGF-β2 / TGFβ2 with a much lower affinity. This type II receptor forms a heterodimeric complex with type I receptor and is essential for signal transduction. Upon ligand binding, the TGFR2 autophosphorylates its cytoplasmic domain and subsequently phosphorylates the downstream molecules which then enter the nucleus and regulate the transcription of a subset of genes related to cell proliferation.

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**Molecular Weight:** 19.1 kDa

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**NCBI Accession:** [NP\\_003233](#)

## Application Details

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**Comment:** Ready-to-use Avitag™ biotinylated protein:

The product is exclusively produced using the Avitag™ technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.

This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.

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**Restrictions:** For Research Use only

## Handling

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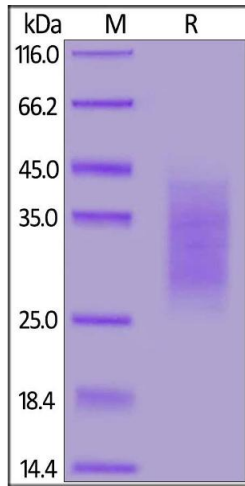
**Format:** Lyophilized

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**Buffer:** PBS, pH 7.4

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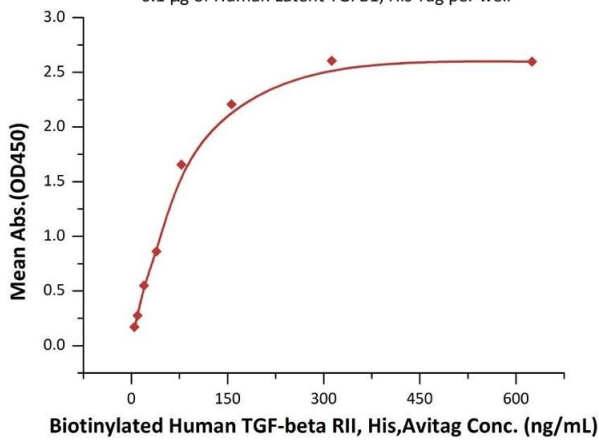
**Storage:** -20 °C



### SDS-PAGE

**Image 1.** Biotinylated Human RII, His,Avitag on under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90 % .

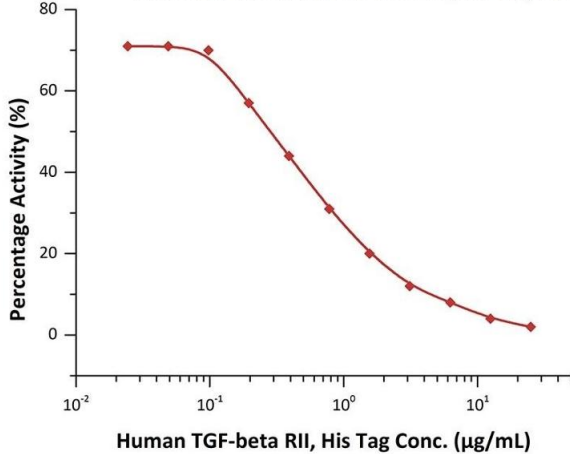
**Biotinylated Human TGF-beta RII, His,Avitag ELISA**  
0.1 µg of Human Latent TGFB1, His Tag per well



### ELISA

**Image 2.** Immobilized Human Latent TGFB1, His Tag (ABIN4949126,ABIN4949127) at 1 µg/mL (100 µL/well) can bind Biotinylated Human RII, His,Avitag (ABIN6973280) with a linear range of 5-78 ng/mL (QC tested).

**Inhibition of Human TGF-beta RII, His Tag ELISA**



### ELISA

**Image 3.** Serial dilutions of Human RII, His Tag (ABIN6973278) were added into Human Latent TGFB1, His Tag (ABIN4949126,ABIN4949127) : Biotinylated Human RII, His,Avitag (ABIN6973280) binding reactions. The half maximal inhibitory concentration (IC50) is 0.39287 µg/mL (Routinely tested).