

# Human Mature TGF beta 3 Protein

Cat. No. TG3-HM00M

## Description

<b>Source</b>	Recombinant Human Mature TGF beta 3 Protein is expressed from HEK293 without tag. It contains Ala301-Ser412.
<b>Accession</b>	P10600-1
<b>Molecular Weight</b>	The protein has a predicted MW of 12.7 kDa. Due to glycosylation, the protein migrates to 13-15 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

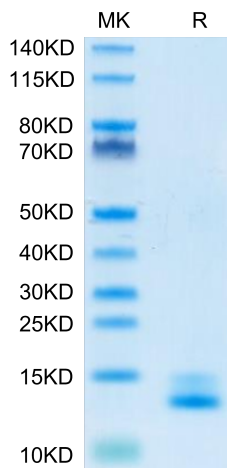
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 4mM HCl. Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in 4mM HCl.
<b>Storage</b>	-20 to -80°C for 12 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

Transforming growth factor-beta 3 is a cytokine which is involved in cell growth regulation and differentiation, stimulation of extracellular matrix and modulation of immune responses. TGF beta 3 RNA is expressed in a diverse array of tissues including perichondrium, bone, intervertebral discs, mesenteries, pleura, heart, lung, palate, and amnion, as well as in central nervous system (CNS) structures such as the meninges, choroid plexus and the olfactory bulbs. Furthermore, in several organ systems, TGF beta 3 transcripts are expressed during periods of active morphogenesis suggesting that the protein may be an important factor for the growth and differentiation of many embryonic tissues.

## Assay Data

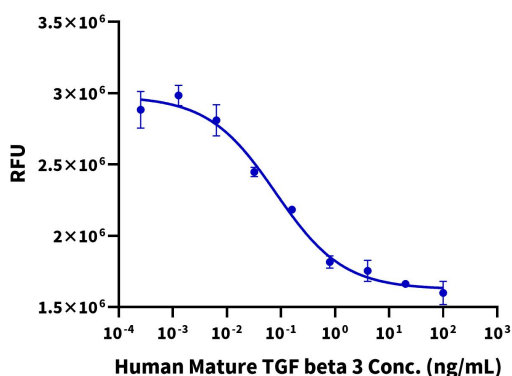
### Bis-Tris PAGE



Human Mature TGF beta 3 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### Cell Based Assay

#### Recombinant Human Mature TGF beta 3 Bioactivity



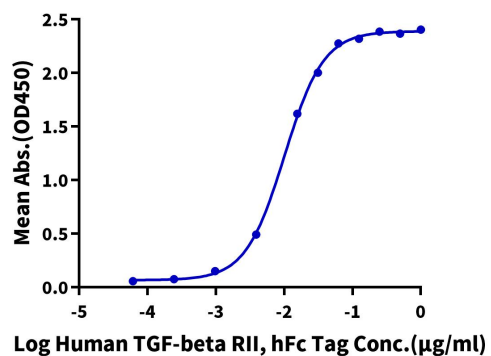
Measured by its ability to inhibit the IL-4-dependent proliferation of TF-1 cells. The ED50 for this effect is 10-80 pg/ml (QC Test).

Assay Data

ELISA Data

**Human Mature TGF beta 3, No Tag ELISA**

0.1µg Human Mature TGF beta 3, No Tag Per Well



Immobilized Human Mature TGF beta 3, No Tag at 1µg (100µl/Well) on the plate. Dose response curve for Human TGF-beta RII, hFc Tag with the EC50 of 10.1ng/ml determined by ELISA (QC Test).