

Human Mature TGF beta 2 Protein

Cat. No. TG2-HM00M

Description

Source	Recombinant Human Mature TGF beta 2 Protein is expressed from HEK293 without tag. It contains Ala303-Ser414.
Accession	P61812-1
Molecular Weight	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.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in 4mM HCl. Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in 4mM HCl.
Storage	-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(2) (TGF-beta(2)), a growth regulator of human lens epithelial cells (HLECs), also regulates the death of these cells. TGF-beta(2)-induced apoptosis in HLECs was preceded by an induction of reactive oxygen species (ROS) and a decrease in glutathione in the intracellular content, indicating that this factor induces oxidative stress in HLECs.

Assay Data

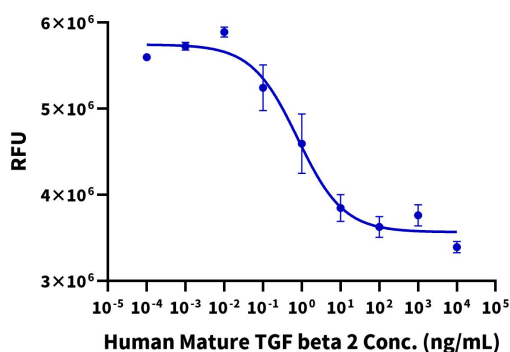
Bis-Tris PAGE



Human Mature TGF beta 2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

Cell Based Assay

Recombinant Human Mature TGF beta 2 Bioactivity



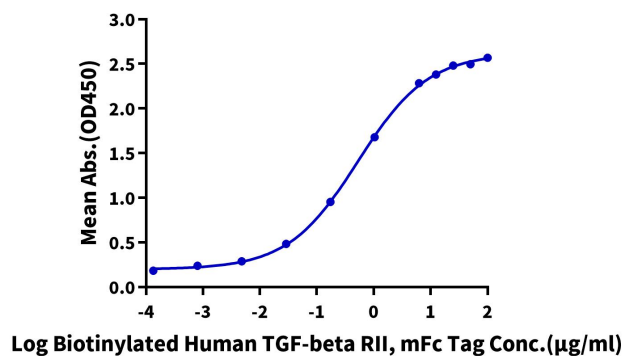
Measured by its ability to inhibit the IL-4-dependent proliferation of TF-1 cells. The ED50 for this effect is 0.1 - 1 ng/ml (QC Test).

Assay Data

ELISA Data

Human Mature TGF beta 2, No Tag ELISA

0.5µg Human Mature TGF beta 2, No Tag Per Well



Immobilized Human Mature TGF beta 2, No Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Human TGF-beta RII, mFc Tag with the EC50 of 0.53µg/ml determined by ELISA (QC Test).