

GFH39

Recombinant Human TGF-β1

Description

Transforming Growth Factor β 1 (TGF-β1) is a member of the TGF-β superfamily of cytokines. Members of this family exhibit regulatory activity in immunity, proliferation, adhesion, migration, and growth inhibition pathways. TGF-β1 signals through SMAD proteins via the TGF-β RI and TGF-β RII receptors.

Length	112 / 224 aa
Molecular Weight	12.8 / 25.6 kDa
Source	CHO cells
Accession Number	P01137
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

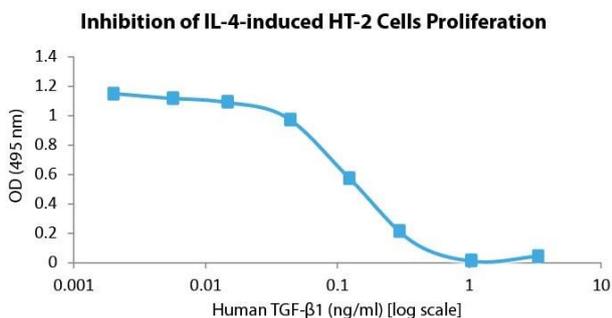
Specifications

Alternative Names	Transforming Growth Factor β 1, TGF β 1, TGF-β-1, TGFB1, TGFβ1
Biological Activity	Human TGF-β1 is fully biologically active when compared to standard. The activity is determined by the ability to inhibit IL-4-induced HT-2 cells proliferation and it is typically less than 500 pg/ml. This corresponds to an expected specific activity of 2 x 10 ⁶ units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1 % trifluoroacetic acid (TFA) and Trehalose in a 20:1 Trehalose to protein ratio
AA Sequence	ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP GASAAPCCVP QALEPLPIVY YVGRKPKVEQ LSMNIVRSCK CS

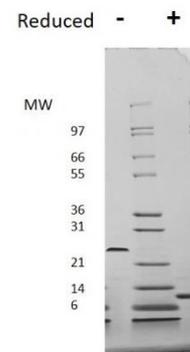
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM HCl at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Inhibition of IL-4-induced HT-2 cells proliferation assay for Human TGF-β1. Cell proliferation was measured to calculate the ED50, which is as expected less than 500 pg/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human TGF-β1 has a predicted Mw of 25.6 kDa (each monomer is 12.8 kDa).