

## GFH109AF Recombinant Human TGF-β3 (Animal-Free)

### Description

Transforming Growth Factors (TGFs) are multifunctional peptides that regulate growth and differentiation in most cell types. The TGF-β family of proteins signal through serine/threonine kinase receptors. TGF-β isoforms (TGF-β1, -β 2, and -β 3) have overlapping, yet distinct biological actions in developing and adult tissues. TGF-β3 is an important factor in regulating cell adhesion and accelerating wound repair. TGF-β3 also functions during osteoblast proliferation, chemotaxis, and collagen synthesis.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

<b>Length</b>	113 / 226 aa
<b>Molecular Weight</b>	12.9 / 25.7 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P10600
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

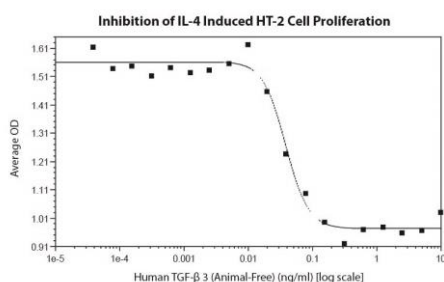
### Specifications

<b>Alternative Names</b>	Transforming Growth Factor β 3, TGF β 3, TGF-β-3, TGFB3, TGFβ3
<b>Biological Activity</b>	Human TGF-β3 is fully biologically active when compared to standard. The activity is determined by the inhibition of IL-4 induced HT-2 cell proliferation and it is typically less than 1 ng/ml. This corresponds to an expected specific activity of 1.0 x 10 <sup>6</sup> units/mg.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	In solution on 10 mM acetic acid and 20% ethanol at a concentration of 0.25 mg/ml
<b>AA Sequence</b>	MALDTNYCFR NLEENCCVRP LYIDFRQDLG WKVWHEPKGY YANFCSGPCP YLRSADTTHS TVLGLYNTLN PEASASPCCV PQDLEPLTIL YYVGRTPKVE QLSNMVVKSC KCS

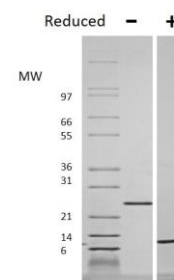
### Preparation and Storage

<b>Reconstitution</b>	Not applicable
<b>Stability and Storage</b>	12 months from date of receipt when stored at 4°C as supplied.

### Data



Inhibition of IL-4 induced HT-2 cell proliferation for Human TGF-β3. Cell proliferation was measured to calculate the ED50, which is as expected less than 1 ng/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-β3 has a predicted Mw of 25.7 kDa (each monomer is 12.9 kDa).