

## GFH109 Recombinant Human TGF-β3

### 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.

<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

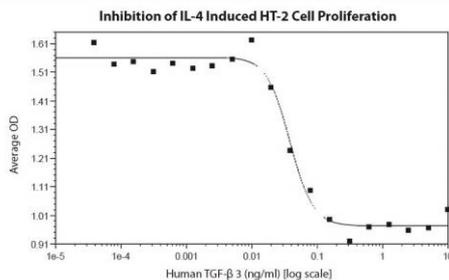
### Specifications

<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>	MALDNTNYCFR NLEENCCVRP LYIDFRQDLG WKWVHEPKGY YANFCSGPCP YLRSADTTHS TVLGLYNTLN PEASASPCCV PQDLEPLTIL YYVGRTPKVE QLSNMVVKSC KCS

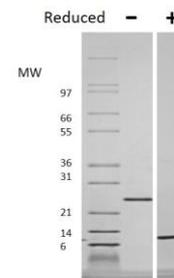
### Preparation and Storage

<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).