

# **Recombinant Human TGF-β3**

## Cat# HST-TB3

### **Product Specifications**

- Expression of Human Proteins in Human Cells
- Extreme low Endotoxin
- High Purity
- Animal Free and Xeno Free
- Tag Free

Source: Human cells derived

Structure: Non-glycosylated homodimer

Purity: >95% by SDS-PAGE Endotoxin Level: <0.5EU/ug Molecular Weight: 25kDa

Formulation: Lyophilized from a 0.2µm filtered solution in 50mM NAOC PH4.0 without carrier

protein

## **Activity Assay**

The activity was measured by its ability to inhibit the IL-4 induced proliferation in mouse HT-2 cells (BALB/c spleen activated by sheep erythrocytes in the presence of IL-2).

#### Reconstitution

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile 4 mM HCl containing at least 0.1% human or bovine serum albumin.

## Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. In general: 12 months from date of receipt, -20 to -80°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution.

3 months, -20 to -80°C under sterile conditions after reconstitution.

## **Protein Description**

Transforming growth factor beta  $3(TGF\beta3)$  is one of three closely related mammalian members of the large TGFβ superfamily, TGF-β1, β2, and β3, signal through the same receptor and elicit similar biological responses. The mammalian TGF-β3 controls a vast array of biological processes including immune regulation, cell proliferation, epithelial-mesenchymal transition, and the bone formation.It is generally recognized to facilitate chondrogenic differentiation of precursor cells.It may also have a dose-dependent inhibitory effect on osteogenesis.Recombinant Human TGF-β3 is a 25.0 kDa protein composed of two identical 112 amino acid polypeptide chains linked by a single disulfide bond.proliferation and differentiation in committed osteoblasts.

#### References

Derynck R, et al. (1985) Nature 316,701-705.

Sporn MBet al. (2006) Cytokine Growth Factor Rev. 17:3.

Ugo Ripamonti U, et al.(2016)Front. Physiol., 08,396.