

Recombinant Human TGF- β 1

Cat# HST-TB1

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 0.2 μ m filtered solution in PBS 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 1 (TGF- β 1) is one of three closely related mammalian members of the large TGF- β superfamily, TGF- β 1, β 2, and β 3, signal through the same receptor and elicit similar biological responses. TGF- β 1 is the most abundant isoform secreted by almost every cell type. TGF- β 1 is a multifunctional cytokine that controls proliferation, differentiation and other functions in many cell types. Many cells synthesize TGF- β 1 and have specific receptors for it. TGF- β 1 positively and negatively regulates many other growth factors. TGF- β 1 plays an important role in bone remodeling as it is a potent stimulator of osteoblastic bone formation, causing chemotaxis, proliferation and differentiation in committed osteoblasts.

References

- Derynck R, et al. (1985) Nature 316,701-705.
Wah SM, (2006) Immunol. Rev. 213, 213.
Tsang M, et al. (1995) Cytokine 7,389.