

## Recombinant human TGFβ-1 (Active, Tag free)

Cat. Number: bs-48018P

Quantity size: 10µg / 50ug / 500µg

**Protein Sequence**: 279-390aa, Tag free, full length mature protein

Swiss-Prot: P01137

Gene ID: 70405

Source: Human cells derived

Structure: Non-glycosylated homodimer

Purity: >95% by SDS-PAGE

MW: 25kDa

Endotoxin Level: <0.5EU/ug

Formulation: Lyophilized from a 0.2µm filtered solution in PBS without carrier protein

Animal and Xeno free

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 PBS containing 0.1% endotoxin-free recombinant human 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.

**Description:** Transforming growth factor beta 1 (TGF- $\beta$ 1) is one of three closely related

mammalian members of the large TGF- $\beta$  superfamily, TGF- $\beta$ 1,  $\beta$ 2, and  $\beta$ 3, signal

through the same receptor and elicit similar biological responses. TGF- $\beta 1$  is the

most abundant isoform secreted by almost every cell type. TGF-β1 is a

multifunctional cytokine that controls proliferation, differentiation and other functions

in many cell types. Many cells synthesize TGF-  $\!\beta 1$  and have specific receptors for it.

TGF- $\beta$ 1 positively and negatively regulates many other growth factors. TGF- $\beta$ 1 plays an important role in bone remodeling as it is a potent stimulator of

osteoblastic bone formation, causing chemotaxis, proliferation and ifferentiation in

committed osteoblasts.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.