

Recombinant Human TGF-β1

Catalog Number: rhTGFb1

Source: Human cells-derived

Purity: 95% evaluated by SDS-PAGE under reducing conditions

Predicted M.W.: 25 kDa (homodimer)

Description Transforming growth factor beta 1 (TGF-β1) is one of three closely related

mammalian members of the large TGF- β superfamily, TGF- β 1, β 2, and β 3. These members 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. TGF- β 1 positively and negatively regulates many other growth factors and plays an important role in hematopoiesis and

endothelial differentiation.

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. This solution could enhance protein stability, increase shelf-life, and allow the recombinant protein to be stored at a more dilute concentration.

Activity: 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).

Handling and Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles. In general:

12 months from date of receipt, -20 to -80 $^{\circ}\mathrm{C}$ as supplied. 1 month, 2 to 8 $^{\circ}\mathrm{C}$ under

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

conditions after reconstitution.

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

Wah SM, (2006) Immunol. Rev. 213, 213.

Tsang M, et al. (1995) Cytokine 7,389.