

TGFB1/TGFβ1/TGF-β1, Human, Recombinant

Cat. No. : PCK091

General Information

Synonyms	Transforming Growth Factor Beta-1;TGF-Beta-1;Latency-Associated Peptide;LAP;TGFB1;TGFB
Species	Human
Expression host	CHO Stable Cells
Sequence	Ala279-Ser390
Accession	P01137
Mol mass	12.8 kDa
Expiration date	12 months
Bio activity	Measured by its ability to inhibit the IL-4-dependent proliferation of TF-1 human erythroleukemic cells. The ED50 for this effect is 4-40 pg/mL.

Product feature

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
Shipping	Ice bag
Formulation	Lyophilized from a 0.2 μm filtered solution of 50 mM Glycine-HCl, 150 mM NaCl, 4% Mannitol, pH 2.5.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Background

Transforming Growth Factor β-1 (TGFβ-1) is a secreted protein which belongs to the TGF-β family. TGFβ-1 is abundantly expressed in bone, articular cartilage and chondrocytes and is increased in osteoarthritis (OA). TGFβ-1 performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and apoptosis. The precursor is cleaved into a latency-associated peptide (LAP) and a mature TGFβ-1 peptide. TGFβ-1 may also form heterodimers with other TGFβ family members. It has been found that TGFβ-1 is frequently upregulated in tumor cells. Mutations in this gene results in Camurati-Engelmann disease.