

Recombinant Human TGF β -1

	Catalog#:P00121 Derived from CHO Stable C
DESCRIPTION	Recombinant Human Transforming Growth Factor Beta 1 is produced by our Mammalian expression system and the target gene encoding Ala279-Ser390 is expressed. Accession#:P01137 Known as:Transforming Growth Factor Beta-1; TGF-Beta-1; Latency-Associated Peptide; LAP; TGFB1; TGFB
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 50mM Glycine, 150mM NaCl, pH2.5
SHIPPING	The product is shipped at ambient temperature.Upon receipt, store it immediately at the temperature listed below.
STORAGE	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
RECONSTITUTION	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
QUALITY CONTROL	Mol Mass:12.8kDa AP Mol Mass:13kDa, reducing conditions. Purity:Greater than 95% as determined by reducing SDS-PAGE. Endotoxin:Less than 0.1 ng/µg (1 EU/µg) as determined by LAL test. Bioactivity: Measured by its ability to inhibit the IL-4-dependent proliferation of TF-1 mouse T cells.The ED50 for this effect is 0.04-0.2 ng/ml.
BACKGROUND	Transforming Growth Factor β -1 (TGF β -1) is a secreted protein which belongs to the TGF- β family. TGF β -1 is abundantly expressed in bone, articular cartilage and chondrocytes and is increased in osteoarthritis (OA). TGF β -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 TGF β -1 peptide. TGF β -1 may also form heterodimers with other TGF β family members. It has been found that TGF β -1 is frequently upregulated in tumor cells. Mutations in this gene results in Camurati- Engelmann disease.

