



Recombinant Human TGF-beta 1

Catalog #	EPT005
Expression Host	CHO Stable Cells
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
Synonyms	Transforming Growth Factor Beta-1; TGF-Beta-1; Latency-Associated Peptide; LAP; TGFB1; TGFB
Mol Mass	12.8 KDa
AP Mol Mass	13 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.01 EU/ μ g as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of 50mM Glycine-HCl, 150mM NaCl, 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 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

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 $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

BACKGROUND

Transforming Growth Factor $\beta -1$ (TGF $\beta -1$) is a secreted protein which belongs to the TGF- β family. TGF $\beta -1$ is abundantly expressed in bone, articular cartilage and chondrocytes and is increased in osteoarthritis (OA). TGF $\beta -1$ 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.

SDS-PAGE

