

Recombinant Human Latent TGF\$\beta\$-1 Catalog No: CA72

Description Recombinant Human Transforming Growth Factor beta 1 is produced by our Mammalian expression

system and the target gene encoding Leu30-Ser390(Cys33Ser) is expressed with a 8His tag at the N-

terminus.

Source **Human Cells**

Alternative name Transforming Growth Factor Beta-1; TGF-Beta-1; Latency-Associated Peptide; LAP; TGFB1; TGFB

P01137 Accession No.

Formulation Lyophilized from a 0.2 µm filtered solution of 50mM Glycine, 50mM NaCl, pH4.0.

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 Purity: Greater than 95% as determined by reducing SDS-PAGE.

> Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. **Storage**

> 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.

Amino Acid Sequence

HHHHHHHLSTSKTIDMELVKRKRIEAIRGQILSKLRLASPPSQGEVPPGPLPEAVLALYNSTRDRVAGES AEPEPEPEADYYAKEVTRVLMVETHNEIYDKFKQSTHSIYMFFNTSELREAVPEPVLLSRAELRLLRLKLK VEQHVELYQKYSNNSWRYLSNRLLAPSDSPEWLSFDVTGVVRQWLSRGGEIEGFRLSAHCSCDSRDNT LQVDINGFTTGRRGDLATIHGMNRPFLLLMATPLERAQHLQSSRHRRALDTNYCFSSTEKNCCVRQLYID

FRKDLGWKWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGASAAPCCVPQ

ALEPLPIVYYVGRKPKVEQLSNMIVRSCKCS

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). 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 TGFβ-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.



Research Use Only



