

TGFβ3/TGFB3, Human, Recombinant

Cat. No. : PCK093

General Information

Synonyms	Transforming growth factor beta-3;TGFB3;TGF-beta-3;Latency-associated peptide;LAP
Species	Human
Expression host	Human Cells
Sequence	Ala301-Ser412 (Tyr340Phe)
Accession	P10600
Mol mass	12.7 KDa
Expiration date	12 months
Bio activity	Measured by its ability to inhibit the IL-4-dependent proliferation of TF-1 mouse T cells.® The ED50 for this effect is 10-80 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 beta 3 (TGFB3) is a member of a TGF-β superfamily which is defined by their structural and functional similarities. TGFB3 is secreted as a complex with LAP. This latent form of TGFB3 becomes active upon cleavage by plasmin, matrix metalloproteases, thrombospondin-1, and a subset of integrins. It binds with high affinity to TGF-β RII, a type II serine/threonine kinase receptor. TGFB3 is involved in cell differentiation, embryogenesis and development. It is believed to regulate molecules involved in cellular adhesion and extracellular matrix (ECM) formation during the process of palate development. Without TGF-β3, mammals develop a deformity known as a cleft palate.®