

Recombinant Human/Murine Transforming Growth Factor - beta 3

#R00612

Size: 5 µg/100 µg/500 µg

Stability & Storage

Please use a manual defrost freezer and avoid repeated freeze-thaw cycles.

-Lyophilized protein should be stored at ≤ -20°C, stable for 12 months after receipt.

-Reconstituted protein solution can be stored at 2-8°C for 1-2 weeks.

-Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

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.

AA Sequence

Ala301-Ser412, Accession #P10600

Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Reconstitute in sterile 4 mM HCl to a concentration of 0.1-1.0 mg/mL. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Product Specification

Species	Human, Murine
Source	CHO Cells
Molecular Weight	Recombinant Human/Murine TGF-beta 3 Protein, a disulfide-linked homodimer, each subunit containing 112 amino acid residues, has a predicted molecular mass of approximately 25.4 kDa.
Purity	> 98% by SDS-PAGE gel and HPLC analyses.
Biological Activity	The ED ₅₀ was determined by TGF-beta3's ability to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is 0.05 ng/ml, corresponding to a specific activity of 2 × 10 ⁷ units/mg.

Formulation	Lyophilized from a 0.22 µm filtered solution of in Acetonitrile and TFA. See CoA for details.
Endotoxin	Less than 0.1 EU/µg of rHu/MuTGF-β3 as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.