

Recombinant Murine/Rat Transforming Growth Factor - beta 1

#R00617

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 1 (TGFβ1) is the prototype of a growing superfamily of peptide growth factors and plays a prominent role in a variety of cellular processes, including cell-cycle progression, cell differentiation, reproductive function, development, motility, adhesion, neuronal growth, bone morphogenesis, wound healing, and immune surveillance. TGF-β1, TGF-β2 and TGF-β3 signal via the same heteromeric receptor complex, consisting of a ligand binding TGF-β receptor type II (TβR-II), and a TGF-β receptor type I (TβR-I). Signal transduction from the receptor to the nucleus is mediated via SMADs. TGF-β expression is found in cartilage, bone, teeth, muscle, heart, blood vessels, haematopoietic cells, lung, kidney, gut, liver, eye, ear, skin, and the nervous system.

AA Sequence

Ala279-Ser390, Accession # P04202

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	Murine,Rat
Source	CHO Cells
Molecular Weight	Recombinant Murine/Rat TGF-beta 1 Protein, a disulfide-linked homodimer, each subunit containing 112 amino acid residues, has a predicted molecular mass of approximately 25.6 kDa.
Purity	> 98% by SDS-PAGE gel and HPLC analyses.
Biological Activity	Measured by its ability to inhibit the IL-4-dependent proliferation of HT- 2 mouse T cells. The ED ₅₀ for this effect is 0.04-0.2 ng/mL.
Formulation	Lyophilized from a 0.22 µm filtered solution of in HCl. See

CoA for details.

Endotoxin

Less than 0.1 EU/μg of
rMu/RtTGF-β as determined by
LAL test.

Shipping

The product is shipped at
ambient temperature. Upon
receipt, store it immediately at
the temperature listed below.
