Recombinant Human Transforming Growth Factor – beta 2 (rHuTGF-β2)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	105-42
Source:	*Mouse myeloma cell line, NS0*
Molecular Weight:	Apparent molecular mass of 24 kDa in SDS-PAGE under non-reducing conditions, 12 kDa under reducing conditions, a disulfide-linked homodimer of two 112 amino acid glycosylated polypeptide chains.
Quantity:	5μg/100μg
AA Sequence:	Ala303-Ser414; Accession # P61812
Purity:	> 97 % by SDS-PAGE 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 0.025-0.25 ng/mL.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from 0.2 μm filtered concentrated solution in 35 % Acetonitrile and 0.1 % TFA.
Endotoxin:	Less than 0.1 EU/μg of rHuTGF-β2 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile 4 mM HCl to a concentration of 0.1 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriately buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	**ChemWhat Limited in UK offers this branded product for research, development or further** evaluation purposes. **NOT FOR HUMAN USE.**

Human Transforming Growth Factor – beta 2

TGF-β2 is a pleiotropic cytokine that regulates immune function, cellular proliferation, and epithelial-mesenchymal transition. It shows cross-species activity in the development of cardiac, lung, craniofacial, limb, eye, ear, and urogenital systems. Latent TGF-β is activated by proteolytic cleavage of the mature cytokine from the latency-associated peptide. TGF-β2 signaling involves the accessory receptor Betaglycan, TGF-β RII, and a type I TGF-β receptor, resulting in the activation of Smad signal transduction.