



Recombinant Human Transforming Growth Factor- β 2 (rhTGF β 2)

Catalog #105-52

Description

There are three mammalian isoforms of transforming growth factor-beta (TGF- β), namely TGF- β 1, TGF- β 2, and TGF- β 3. These multifunctional cytokines signal through the same receptor and elicit similar biological responses. They play crucial roles in regulating cell proliferation, growth, differentiation, motility, and the synthesis and deposition of the extracellular matrix. The release of the biologically active TGF- β isoform from a latent complex involves intracellular proteolytic processing. TGF beta 1, TGF beta 2, and TGF beta 1.2 exhibit similar biological activities, although they differ in receptor binding affinities. TGF beta 2 is found in high concentrations in platelets and bone. It is the prominent isoform in body fluids like amniotic fluid, breast milk, and the aqueous and vitreous humor of the eye. Recombinant Human TGF- β 2 consists of two identical 112-amino acid polypeptide chains connected by a single disulfide bond and has a molecular weight of 24.0 kDa.

Specifications

Synonyms:	Transforming Growth Factor- β 2, Glioblastoma-derived T-cell suppressor factor, G-TSF, BSC-1 cell growth inhibitor, Polyergin, Cetermin
AA Sequence:	ALDAAYCFRN VQDNCCLRPL YIDFKRDLGW KWIHEPKGYN ANFCAGACPY LWSSDTQHRS VLSLYNTINPE ASASPCCVSQ DLEPLTILYYI GKTPKIEQLSN MIVKSKCS
Source:	mammalian cell
Molecular Weight:	24.0 kDa, a disulfide bond linked non-glycosylated polypeptide chains containing two 112 amino acids
Purity	> 95%

Quality Control

Endotoxin:	<0.1 ng/ μ g of protein (<1 EU/ μ g)
Sterility	No microorganisms
Physical Appearance:	Light yellow to white powder

Rev. 1

Formulation

Lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in 30 mM Glycine-HCl and 100 mM NaCl with dextran as protectant.

Reconstitution

Reconstitute in sterile distilled water or 0.04 M HCl containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

Shipping and Storage

Gel pack. Upon receipt, store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage

rhTGFb2 is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.