

Transforming Growth Factor-Beta 1, CHO, human recombinant (rHuTGFb1-CHO)

Catalog No: 97361 Lot No: XXXXX Source: CHO

Synonyms: Transforming growth factor beta-1, TGF-beta-1, CED, DPD1, TGFB, TGF-b 1, LAP, TGFB1

Background

Transforming growth factor betas (TGFbetas) mediate many cell-cell interactions that occur during embryonic development. Three TGFBetas have been identified in mammals. TGFBeta1, TGFBeta2 and TGFBeta3 are each synthesized as precursor proteins that are very similar in that each is cleaved to yield a 112 amino acid polypeptide that remains associated with the latent portion of the molecule.

Description

TGF-b1 human recombinant produced in CHO cells is a homodimeric polypeptide chain containing 2 x 112 amino acids and having a total molecular mass of 25.6 kDa. TGF-bB1 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a sterile filtered solution containing 0.1% trifluoroacetic acid (TFA) and trehalose (1:20 protein to trehalose ratio).

Solubility

It is recommended to reconstitute the lyophilized TGFB1 in sterile 10 mM acetic acid at a concentration of 0.1 mg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized TGFB1, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TGFB1 human should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino Acid Sequence

ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY IWSLDTQYSK VLALYNQHNP GASAAPCCVP QALEPLPIVY YVGRKPKVEQ LSNMIVRSCK CS

Activity

The ED50, determinded by the dose-dependent inhibition of IL-4-induced proliferation of mouse HT-2 cells is 0.148 ng/ml, corresponding to a specific activity of 6.8x10⁶ untis/mg.





Usage

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