# Transforming Growth Factor beta 1, Human Recombinant, CHO

**CA903**

## Storage

Lyophilized TGFB1 although stable at room temperature for 3 weeks, should be stored desiccated below 18°C. Upon resconstitution 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 cycle.

## Contents





## Introduction

Transforming growth factor beta (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 pre -cursor 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

TGFB1 Human Recombinant produced in CHO cells is a glycosylated homodimeric polypeptide chain containing 2 X 112 amino acids and having a total molecular mass of 25.6kDa. The TGFB1 is purifed by proprietary chromatographic techniques.

## Source

CHO cells

## Synonyms

TGF-beta-1, CED, DPD1, TGFB, TGF-b 1, LAP, TGFB1.

## Physical Apperance

Sterile filtered white lyophilized (freeze-dried) powder.

## Solubility

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

## Formulation

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

## Purity

Greater than 95.0% as determined by:
(a) Analysis by SDS-PAGE

## Amino acid sequence

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

## Biological Activity

The $ED_{50}$ as determined by the dose-dependent inhibition of IL-4-induced proliferation of HT-2 cells is 45.9pg/ml, corresponding to a specific activity of $2.2x10^7$units/mg.

## References


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Publication:Kallio H, Tolvanen M, J?nis J, Pan P-w, Laurila E, et al. (2011) Characterization of Non-Specific Cytotoxic Cell Receptor Protein 1: A New Member of the Lectin-Type Subfamily of F-Box Proteins. PLoS ONE 6(11): e27152. doi:10.1371/journal.pone.0027152
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