

#### RayBiotech, Inc.

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#### Certificate of Analysis and Data Sheet

# **Human Transforming Growth Factor-Beta 1**

0	Catalog No.	? ? ?	Source	`\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
(	228-11494	?	Human Platelets	~
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## Synonyms

Transforming growth factor beta-1, TGF-beta-1, CED, DPD1, TGFB, TGF-b 1.

#### Introduction

Transforming growth factor betas (TGF Betas) mediate many cell-cell interactions that occur during embryonic development. Three TGF Betas 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

Human Transforming Growth Factor-beta 1 purified from Human Platelets having a molecular mass of 25kDa.

The TGF-b 1 is purified by proprietary chromatographic techniques.

## Physical Appearance

Sterile Filtered lyophilized powder.

#### **Formulation**

Each µg TGF-Beta1 protein contains 10µg Bovine Serum Albumin as a preservative.

### **Purity**

Greater than 97.0%.

### Solubility

It is recommended to reconstitute 5µg lyophilized TGF-beta 1 in sterile 100µl 5mM HCl, which can then be further diluted to the desired aliquot to 1ml of PBS containing 2mg Bovine Serum Albumin.



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## **Biological Activity**

Stimulates the growth of NRK-1 cells in soft agar at concentrations ranging from 0.1 to 5ng/ml. Effective concentration ranges must be experimentally determined. Purified EGF and/or TGF-alpha at concentrations of at least 2ng/ml must be present for observation of the biological activity.

## Stability

Lyophilized TGF-beta 1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TGF-beta 1 should be stored at 4°C between 2-7 days and for future use below -18°C.

DO NOT RECONSTITE WITH NEUTRAL BUFFERS.
DO NOT USE GLASS IMPLEMENTS OR EXTENSIVE MANIPULATIONS.
PREVENT FREEZE THAW CYCLES.