

# Recombinant Human TGF- $\beta$ 1

**CATALOG #:** 4342-5 5  $\mu$ g  
 4342-50 50  $\mu$ g  
 4342-500 500  $\mu$ g

**LOT #:** \_\_\_\_\_

**SOURCE:** CHO cells

**PURITY:** >98% by SDS-PAGE and HPLC analyses  
 Endotoxin level is <0.1 ng per  $\mu$ g (1EU/ $\mu$ g).

**MOL. WEIGHT:** 25.0 kDa

**FORM:** Lyophilized from Sodium Citrate buffer, pH 3.5

## RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitution in water to a concentration of 50  $\mu$ g/ml (e.g., 5  $\mu$ g/100  $\mu$ l) will yield a solution of 1 mM citrate buffer (pH 3.5). The solution can then be stored at 4°C for 1 month. It is recommended that further dilutions be made in PBS containing 2 mg/ml albumin and stored at -20°C.

## STORAGE CONDITIONS:

The lyophilized TGF- $\beta$ 1 is best-stored at -20°C. Reconstituted TGF- $\beta$ 1 should be stored in working aliquots at -20°C.

## DESCRIPTION:

TGF- $\beta$ <sub>1</sub> (Transforming Growth Factor-beta 1) is a member of the superfamily of homologous, disulfide-linked, homodimeric proteins that regulate the proliferation and differentiation of normal and transformed cells. Human TGF- $\beta$ 1 is a 25.0 kDa protein containing two identical 112 amino acid polypeptide chains linked by a single disulfide bond.

## BIOLOGICAL ACTIVITY:

The ED<sub>50</sub> as determined by the ability of TGF- $\beta$ 1 to inhibit the mouse IL-4-dependent proliferation of mouse HT-2 cells is  $\leq$ 0.05 ng/ml, corresponding to a specific activity of  $\geq$ 2 x 10<sup>7</sup> units/mg.

**USAGE:** For Research Use Only! Not to be used in humans.

## RELATED PRODUCTS:

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- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

### Cell Fractionation System

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- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

### Cell Proliferation & Senescence

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- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

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- Akt & JNK Activity Assay Kits
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- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- $\beta$ -Galactosidase Staining Kit & Luciferase Reporter Assay Kit

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