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### TGFB1

### **Recombinant Human Transforming Growth Factor-beta 1**

**Catalog No.** CS327A **Quantity**: 5 μg

CS327B 20 μg CS327C 1.0 mg CS327D 100 μg

Alternate Names: Precursor of Latency-asoociated protein (LAP), TGFB1, TGFbeta

**Description:** Transforming Growth Factor-beta 1 (TGF-beta1) is a member of the TGF-beta

superfamily. Members of this family are known to exhibit regulatory activity in immunity and proliferation pathways. TGF-beta1 signals through SMAD proteins via the TGF-beta1

RI and RII receptors. Mature human TGF-beta1 is a glycosylated homodimer.

**Gene ID:** 7040

UniProt ID: P01137

Source: CHO cell line

**Molecular Weight:** 12.8/25.6 kDa (112/224 aa) dimer

Formulation: Lyophilized from a sterile buffer containing 0.1% trifluoroacetic acid (TFA) and trehalose

in a 20:1 trehalose to protein ratio.

**Purity:** ≥ 95% by Reducing and Non-reducing SDS-PAGE

**Endotoxin Level:**  $\leq 1 \text{ EU/µg protein, determined by kinetic LAL.}$ 

**Biological Activity:** ≤ 500 pg/ml, determined by the dose-dependent inhibition of IL-4-induced HT-2 cell

proliferation.

**Specific Activity:**  $\geq 2.0 \times 10^6 \text{ U/mg}$ 

Calibrated against recombinant human TGF-beta 1 Reference Standard NIBSC code:

89/514, rhTGF-beta1 =  $2.2 \times 10^4$  RU/mg

Amino Acid Sequence: ALDTNYCFSS TEKNCCVRQL YIDFRKDLGW KWIHEPKGYH ANFCLGPCPY

IWSLDTQYSK VLALYNQHNP GASAAPCCVP QALEPLPIVY YVGRKPKVEQ

LSNMIVRSCK CS

**Reconstitution:** Centrifuge vial before opening. When reconstituting the product, gently pipet and wash

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down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile **10 mM HCI** at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions

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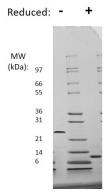
containing 0.1% BSA.

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#### Storage & Stability:

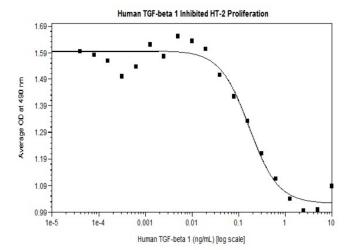
Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.

Avoid repeated freeze-thaw cycles.



#### Human TGF-beta 1 Gel

Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human TGF-beta 1 is a homodimer with a total predicted MW of 25.6 kDa (each monomer is 12.8 kDa).



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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