



Recombinant Human TGF- β 1
(Transforming Growth Factor beta 1)

Catalog Number: 100-39

Accession Number: P01137

Specifications and Uses:

Alternate Names: Differentiation inhibiting factor, cartilage-inducing factor

Description:

Transforming Growth Factor-beta 1 (TGF- β 1) is a member of the TGF-beta superfamily. Members of this family are known to exhibit regulatory activity in immunity and proliferation pathways. TGF- β 1 signals through SMAD proteins via the TGF- β 1 RI and RII receptors. Mature human TGF- β 1 is a glycosylated homodimer, containing two 112 amino acids chains, with a total molecular weight of 25 kDa.

Source: *HEK 293 cells*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:

Recombinant human TGF- β 1 is lyophilized from a sterile buffer containing 10 mM HCl and 50 ug BSA per mg/mL of protein.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash 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 **5 mM HCl + 50 μ g/mL BSA** at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity (typically \geq 98%) determined by:

Reducing and Non-reducing SDS-PAGE

Endotoxin Level:

Measured by kinetic LAL analysis and is typically \leq 1 EU/ μ g protein.

Biological Activity:

The activity is measured by the dose-dependent inhibition of IL-4-induced proliferation from mouse HT-2 cells and is typically 0.04-0.2 ng/mL.

AA Sequence:

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

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

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