

BACKGROUND:

Transforming growth factor-beta 1 (TGF-β1) is a member of the TGF-beta superfamily of cytokines. Members of this family exhibit regulatory activity in immunity, proliferation, adhesion, migration, and growth inhibition pathways. TGF-β1 signals through SMAD proteins via the TGF-βRI and TGF-βRII receptors.

Recombinant human Transforming growth factor-beta 1 is a non-glycosylated protein dimer, containing 112/224 amino acids and having a molecular mass of 12.8/25.6 kDa.

Cat. No.:

RP1039

Alternate Names:

Differentiation inhibiting factor, cartilage-inducing factor

AA Sequence:

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

TECHNICAL INFO**Source:***CHO cells***Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

0.1 % trifluoroacetic acid (TFA) and Trehalose in a 20:1 Trehalose to protein ratio

Stability:

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:

0.1 % trifluoroacetic acid (TFA) and Trehalose in a 20:1 Trehalose to protein ratio.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is measured by the dose-dependent inhibition of IL-4-induced HT-2 cell proliferation, Bioactivity Acceptance Criteria ED50 at 500 pg/mL.

