



## **Overview**

**Synonyms** 

TGF-beta-1; CED; DPD1; TGFB; TGF-b1; TGFB1; CEDLAP; latency-associated peptide;

TGFbeta; TGF-beta 1 protein; transforming growth factor beta-1

Transforming growth factor beta 1 (TGF<sup>2</sup> 1) is the prototype of a growing superfamily of peptide growth factors and plays a prominent role in a variety of cellular processes, including cell-cycle progression, cell differentiation, reproductive function, development, motility, adhesion, neuronal growth, bone morphogenesis, wound healing, and immune surveillance. TGF-2 1, TGF-2 2 and TGF-2 3 signal via the same heteromeric receptor complex, consisting of a ligand binding TGF-2 receptor type II (T2 R-II), and a TGF-2 receptor type I (T<sup>2</sup> R-I). Signal transduction from the receptor to the nucleus is mediated

via SMADs. TGF-2 expression is found in cartilage, bone, teeth, muscle, heart, blood vessels, hematopoietic cells, lung, kidney, gut, liver, eye, ear, skin, and the nervous

system.

Recombinant Mouse TGF-2 1 produced by a mammalian expression system is a polypeptide chain containing 112 amino acids. A fully biologically active molecule; rm TGF-2 1 a molecular mass of 12.8 kDa analyzed by reducing SDS-PAGE and is obtained

by chromatographic techniques.

Source Human Cells

**Biological Activity** ED50 <0.2 ng/ml, measured in a cell proliferation assay using mouse HT-2 cells.

Ala<sup>279</sup>-Ser<sup>390</sup> (Accession #:P04202); ALDTNYCFSSTEKNCCVRQLYIDFRKDLGWKWIH

Sequence EPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQH

NPGASASPCCVPQALEPLPIVYYVGRKPKVEQLS

NMIVRSCKCS

## **Properties**

Storage

**Description** 

Measured Molecular 12.8 kDa; observed by reducing SDS-PAGE. Weight

**Purity** > 95% as analyzed by SDS-PAGE.

**Formulation** Lyophilized from a 0.2 µm filtered solution in of 4 mM HCl.

Reconstitution Reconstituted in ddH<sub>2</sub>O at 100 µg/ml. **Endotoxin Level** < 1 EU/µg; determined by LAL method.

Lyophilized recombinant TGF-2 1, Mouse remains stable up to 6 months at lower than -

70°C from date of receipt. Upon reconstitution; Mouse TGF-2 1 should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

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