

TGF- β 1
Catalog # PVGS1550**Specification**

TGF- β 1 - Product Information

Primary Accession [P04202](#)
Species
Mouse

Sequence
Ala279-Ser390

Purity
> 95% as analyzed by SDS-PAGE

Endotoxin Level
< 1 EU/ μ g of protein by LAL method

Biological Activity
ED₅₀ is 5-25 pg/ml, measured by its ability to inhibit IL-4-dependent proliferation of TF-1 human erythroleukemic cells.

Expression System
Human Cells

Formulation **Lyophilized from a 0.2 μ m filtered solution in 4 mM HCl.**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O up to 100 μ g/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

TGF- β 1 - Additional Information

Gene ID 21803

Other Names
Transforming growth factor beta-1 proprotein, Latency-associated peptide, TGF-beta-1, Tgfb1 {ECO:0000312|MGI:MGI:98725}

Target Background
Transforming growth factor beta 1 (TGF β 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- β 1, TGF- β 2 and

TGF- β 3 signal via the same heteromeric receptor complex, consisting of a ligand binding TGF- β receptor type II (T β R-II), and a TGF- β receptor type I (T β R-I). Signal transduction from the receptor to the nucleus is mediated via SMADs. TGF- β expression is found in cartilage, bone, teeth, muscle, heart, blood vessels, hematopoietic cells, lung, kidney, gut, liver, eye, ear, skin, and the nervous system.

TGF- β 1 - Protein Information

Name Tgfb1 {ECO:0000312|MGI:MGI:98725}

Function

Transforming growth factor beta-1 proprotein: Precursor of the Latency-associated peptide (LAP) and Transforming growth factor beta-1 (TGF-beta-1) chains, which constitute the regulatory and active subunit of TGF-beta-1, respectively.

Cellular Location

[Latency-associated peptide]: Secreted, extracellular space, extracellular matrix
{ECO:0000250|UniProtKB:P01137}

Tissue Location

Expressed in cardiomyocytes (PubMed:26858265). Weakly expressed in the mammary glands, with a slight increase of expression following onset of involution (PubMed:19745830)

TGF- β 1 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TGF- β 1 - Images