10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TGF-β1

Catalog # PVGS1550

Product Information

Primary Accession	P04202
Species	Mouse
Sequence	Ala279-Ser390
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Biological Activity	ED_{50} 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 μm 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 ddH_2O up to 100 μg/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.

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 (TGFβ1) 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-β1, TGF-β2 and TGF-β3 signal via the same heteromeric receptor complex, consisting of a ligand binding TGF-β receptor type II (TβR-II), and a TGF-β receptor type I (TβR-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.

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)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.