

**TGF- $\beta$ 3**  
**Catalog # PVGS1533****Specification**

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**TGF- $\beta$ 3 - Product Information**

Primary Accession [P10600](#)  
**Species**  
Human

**Sequence**  
Ala301-Ser412

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

**Endotoxin Level**  
< 1 EU/  $\mu$ g of protein by LAL method

**Biological Activity**  
ED<sub>50</sub> < 0.2 ng/ml, measured in a cell proliferation assay using mouse HT-2 cells.

**Expression System**  
Human Cells

Formulation **Lyophilized from a 0.2  $\mu$ 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 ddH<sub>2</sub>O up to 100  $\mu$ 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- $\beta$ 3 - Additional Information**

**Gene ID** 7043

**Other Names**  
Transforming growth factor beta-3 proprotein, Latency-associated peptide, LAP, Transforming growth factor beta-3, TGF-beta-3, TGFB3

**Target Background**  
Transforming growth factor beta 3(TGFB3) is a member of a TGF - $\beta$  superfamily which is defined by their structural and functional similarities. TGFB3 is secreted as a complex with LAP. This latent form of TGFB3 becomes active upon cleavage by plasmin, matrix metalloproteases, thrombospondin -1, and a subset of integrins. It binds with high affinity to TGF-  $\beta$  RII, a type II serine/threonine kinase receptor. TGFB3 is involved in cell differentiation, embryogenesis and

development. It is believed to regulate molecules involved in cellular adhesion and extracellular matrix (ECM) formation during the process of palate development. Without TGF- $\beta$ 3, mammals develop a deformity known as a cleft palate.

## **TGF- $\beta$ 3 - Protein Information**

**Name** TGFB3

### **Function**

Transforming growth factor beta-3 proprotein: Precursor of the Latency-associated peptide (LAP) and Transforming growth factor beta-3 (TGF-beta-3) chains, which constitute the regulatory and active subunit of TGF-beta-3, respectively.

### **Cellular Location**

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

## **TGF- $\beta$ 3 - 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- $\beta$ 3 - Images**