


## Human TGF- $\beta$ 3 protein

Cat #: PRP1069

Size: 5 $\mu$ g/20 $\mu$ g/100 $\mu$ g/1mg

### Product Information

|   |   |            |   |
|---|---|------------|---|
|   | <b>Product Name:</b> Human TGF- $\beta$ 3 protein               |            |   |
| <b>REF</b>  | <b>Catalog Number:</b> PRP1069                                  | <b>LOT</b> | <b>Lot Number:</b> Refer to product label |
|   | <b>Purity:</b> > 98% as determined by SDS-PAGE                  |            |   |
|  | <b>Storage:</b> Store at -20°C                                  |            | <b>Preparation method:</b> E.coli         |
|   | <b>Shipping:</b> The product is shipped at ambient temperature. |            |   |

**Background:** TGF- $\beta$ 3 (transforming growth factor- $\beta$ 3) is a member of a TGF-beta superfamily subgroup that performs many cellular functions. TGF- $\beta$ 3 has a role in embryogenesis and cell differentiation. TGF- $\beta$ 3 also plays a critical role in palatogenesis, the wound healing process. TGF- $\beta$ 3 is important in embryonic development, scarless repair of injury in the embryo, adult wound healing and tissue homeostasis. It has an important role in regulating cell migration, angiogenesis, epithelial-mesenchymal transition, apoptosis, modulation of immune function, extracellular matrix (ECM) production and the regulation of ECM remodelling; biological processes that are often required for tumour growth and maintenance.

**Sequence:** Amino acid sequence derived from Human TGF- $\beta$ 3 protein (Ala301-Ser412) with was with 6 $\times$ His tag at the C-terminus expressed.

**Protein length:** The recombinant Human TGF- $\beta$ 3 consists of 112 amino acids and predicts a molecular mass of 13.66 kDa.

**Biological Activity:** Measure by its ability to inhibit IL-4-induce proliferation in HT-2 cells. The ED<sub>50</sub> for this effect is <50 pg/mL. The specific activity of recombinant human TGF- $\beta$ 3 is > 2 x 10<sup>7</sup> IU/mg.

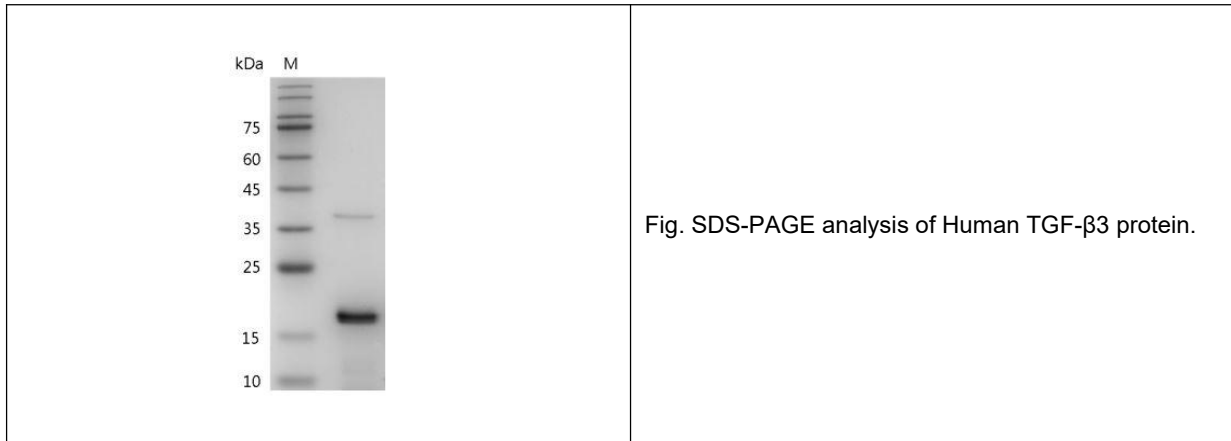
**Endotoxin:** < 0.1 EU per  $\mu$ g of the protein as determined by the LAL method.

**Formulation:** The protein was lyophilized from 0.01% sarkosyl in 1X PBS, pH 8.0.

**Storage Instructions:** Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein ( (5% HSA , 10%FBS or 0.1%BSA)). Please prevent freeze-thaw cycles.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant Human

TGF- $\beta$ 3 protein to a concentration of 0.1-1 mg/mL in sterile ddH<sub>2</sub>O, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.



**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.