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# Recombinant Human TGF beta 1 Protein (His Tag)

Catalog Number: PDMH100131

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### Description

Species Human

Source HEK293 Cells-derived Human TGF beta 1 protein Met1-Ser390, with an C-terminal

His

Calculated MW42.8 kDaObserved MW48 kDaAccessionP01137

Bio-activity Not validated for activity

#### **Properties**

**Purity** > 95% as determined by reducing SDS-PAGE.

Endotoxin < 1.0 EU/mg of the protein as determined by the LAL method

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -

80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping

This product is provided as lyophilized powder which is shipped with ice packs.

Formulation

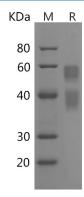
Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution

of 0.5 mg/mL. Concentration is measured by UV-Vis.

## Data



SDS-PAGE analysis of Human TGF beta 1 proteins, 2 µg/lane of Recombinant Human TGF beta 1 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 48 kDa.

## **Background**

Transforming Growth Factor  $\beta$ -1 (TGF $\beta$ -1) is a secreted protein which belongs to the TGF- $\beta$  family. TGF $\beta$ -1 is abundantly expressed in bone, articular cartilage and chondrocytes and is increased in osteoarthritis (OA). TGF $\beta$ -1 performs many cellular functions, including the control of cell growth, cell proliferation, cell differentiation and apoptosis. The precursor is cleaved into a latency-associated peptide (LAP) and a mature TGF $\beta$ -1 peptide. TGF $\beta$ -1 may also form heterodimers with other TGF $\beta$  family members. It has been found that TGF $\beta$ -1 is frequently upregulated in tumor cells. Mutations in this gene results in Camurati-Engelmann disease.

### For Research Use Only

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