A Reliable Research Partner in Life Science and Medicine

# Recombinant Human Transforming Growth Factor Beta-1/TGFB1 Biotinylated

Catalog Number: PKSH034059

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

# Description

Species Human

Source HEK293 Cells-derived Human TGFB1 protein Ala279-Ser390, with an N-terminal Avi

Calculated MW 14.6 kDa
Observed MW 12-18 kDa
Accession P01137

**Bio-activity** Measured by its ability to inhibit TGF-beta 1 activity on TF- 1 human erythroleukemic

cells. The ED<sub>50</sub> for this effect is 137.37pg/ml.

# **Properties**

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

Endotoxin <0.01 EU per μg 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 of 50mM Glycine-HCl, 150mM NaCl,

pH2.5.

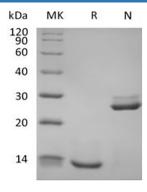
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

#### Data



> 95 % as determined by reducing SDS-PAGE.

## 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