A Reliable Research Partner in Life Science and Medicine

# Recombinant Human TNF beta/TNFB Protein

Catalog Number: PKSH033166

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

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Species Human

Source E.coli-derived Human TNF beta/TNFB protein Leu35-Leu205, with an N-terminal His

Calculated MW 18.7 kDa
Observed MW 21 kDa
Accession P01374

**Bio-activity** Measure by its ability to induce cytotoxicity in L929 cells in the presence of

actinomycin D. The ED<sub>50</sub> for this effect is <3 pg/mL. The specific activity of

recombinant human TNF beta is  $> 3.3 \times 10^8$  IU/mg.

#### **Properties**

Purity > 98 % as determined by reducing SDS-PAGE.

**Endotoxin** < 0.1 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 sterile 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.

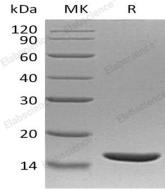
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

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

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

## Data



> 98 % as determined by reducing SDS-PAGE.

## Background

Tumor Necrosis Factor  $\beta$  (TNF- $\beta$ ) is a secreted protein belonging to the tumor necrosis factor family. TNF- $\beta$  binds to TNFRSF1A/TNFR1, TNFRSF1B/TNFBR and TNFRSF14/HVEM in homotrimeric form, binds to TNFRSF3/LTBR in heterotrimeric form with LTB. TNF- $\beta$  forms heterotrimers with lymphotoxin-beta, which anchors TNF- $\beta$  to the cell surface. TNF- $\beta$  mediates the inflammatory, immunostimulatory, and antiviral response, involves in the formation of second lymphoid organs during development, has a role in apoptosis. TNF- $\beta$  is produced by lymphocytes and cytotoxic for a variety of tumor cells in vitro and in vivo.

#### For Research Use Only