

**Recombinant Human TNF- $\beta$  (E.coli-derived)**  
**Catalog # PBG10455**

**Specification**

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**Recombinant Human TNF- $\beta$  (E.coli-derived) - Product Information**

**Recombinant Human TNF- $\beta$  (E.coli-derived) - Additional Information**

**Description**

TNF- $\beta$  is a potent mediator of inflammatory and immune responses. It belongs to the TNF family of ligands and signals through TNFR1 and TNFR2. TNF- $\beta$  is produced by activated T and B lymphocytes, and has similar activities to TNF- $\alpha$ . Like TNF- $\alpha$ , TNF- $\beta$  is involved in the regulation of various biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, coagulation, and neurotransmission. TNF- $\beta$  is secreted as a soluble polypeptide, but can form heterotrimers with lymphotoxin- $\beta$ , which effectively anchors the TNF- $\beta$  to the cell surface. TNF- $\beta$  is cytotoxic to a wide range of tumor cells. Recombinant human TNF- $\beta$  is a secreted 171 amino acid protein (18.6 kDa) which forms an active non-disulfide linked homotrimer structure in solution.

**BiologicalActivity**

The  $ED_{50}$  as determined by the cytolysis of murine L929 cells in the presence of Actinomycin-D is  $\leq 0.05$  ng/ml, corresponding to a specific activity of  $\geq 2 \times 10^7$  units/mg.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is  $<0.1$  ng/  $\mu$ g of protein ( $<1EU/ \mu$ g).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

Recombinant Human TNF- $\beta$  (E.coli-derived) is for research use only and not for use in diagnostic or therapeutic procedures.

**Recombinant Human TNF- $\beta$  (E.coli-derived) - 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](#)

**Recombinant Human TNF- $\beta$  (E.coli-derived) - Images**