

Recombinant Human TNFβ / Tumor Necrosis Factor beta,

**Animal Free & Carrier Free** 

Cat #: C-CYP215

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

**Product Overview** 

TNF-β works as a potential mediator in the inflammatory and immune process. It a component of the TNF family of

ligands, and signals through TNFR1 and TNFR2. TNF-β is secreted by activated T and B lymphocytes, and has similar

function to TNF- $\alpha$ . In the same manner as TNF- $\alpha$ , TNF- $\beta$  is involved in the regulation of various biological processes,

including cell proliferation, differentiation, apoptosis, lipid metabolism, coagulation, and neurotransmission. TNF-β is

generally released as a soluble polypeptide. In addition, lymphotoxin-β can anchor TNF-β to the cell surface and form

heterotrimers in an effective manner. TNF-β is cytotoxic to a wide range of tumor cells

**Product Information** 

Source: Escherichia Coli.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological 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  $> 3.3 \times 10^8 \text{ IU/mg}$ .

**Endotoxin:** <0.1 EU per 1 μg of the protein by the LAL method.

Amino acid sequence:

LPGVGLTPSAAQTARQHPKMHLAHSTLKPAAHLIGDPSKQNSLLWRANTDRAFLQDGFSLSNNSLLVPTSGIYFVYSQVVFSGKAYSPKATS

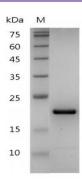
SPLYLAHEVQLFSSQYPFHVPLLSSQKMVYPGLQEPWLHSMYHGAAFQLTQGDQLSTHTDGIPHLVLSPSTVFFGAFAL with

polyhistidine tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 20 mM sodium citrate, 0.2 M NaCl, pH 3.5







SDS-PAGE analysis of recombinant human TNF beta

## **Usage Method**

- 1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
- 2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled  $H_2O$ . Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
- 3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
- 4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10  $\mu$ g/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.

