

## Recombinant Mouse, TNF $\beta$ / Tumor Necrosis Factor beta,

### Animal Free & Carrier Free

Cat #: C-CYP200

Size: 5 $\mu$ g, 20 $\mu$ g, 100 $\mu$ g, 500 $\mu$ g, 1mg

Shipping: Blue Ice

### Product Overview

TNF- $\beta$  works as a potential mediator in the inflammatory and immune process. It is a component of the TNF family of ligands, and signals through TNFR1 and TNFR2. TNF- $\beta$  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- $\beta$  is generally released as a soluble polypeptide. In addition, lymphotoxin- $\beta$  can anchor TNF- $\beta$  to the cell surface and form heterotrimers in an effective manner. TNF- $\beta$  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

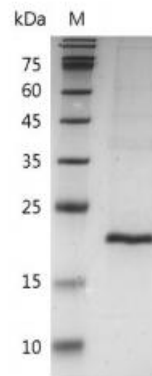
ED<sub>50</sub> for this effect is < 30 ng/mL.

**Endotoxin:** <0.1 EU per 1  $\mu$ g of the protein by the LAL method.

**Amino acid sequence:**

LSGVRFSAAARTAHPLPQKHLTHGILKPAAHLVGYPSKQNSLLWRASTDRAFLRHGFSLSNNSLLIPTSGLYFVYSQVVFSGESCSPRAIPTIYL  
AHEVQLFSSQYPFHVPLLSAQKSVYPGLQGPWVRSMYQGAVFLLSKGDQLSTHTDGISHLHFSPSSVFFGAFAL with polyhistidine tag  
at the N-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1 $\times$ PBS, pH 8.0.



SDS-PAGE analysis of recombinant mouse 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<sub>2</sub>O. 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 µg/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.