

## Recombinant Mouse / Rat, TNF $\alpha$ / Tumor Necrosis Factor alpha, Animal Free & Carrier Free

Cat #: C-CYP198

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

Shipping: Blue Ice

### Product Overview

TNF- $\alpha$  is a kind of pleiotropic pro inflammatory cytokine. It is secreted by various cells, such as adipocytes, activated monocytes, macrophages, B cells, T cells and fibroblasts. Proteolysis of the integral membrane precursor form of TNF- $\alpha$  from cells soluble can release homotrimeric TNF- $\alpha$ . TNF- $\alpha$  can bind with some TNF- $\alpha$  receptors induces apoptosis, besides, also trigger other responses depending on cell type, receptor expression, and signal transduction status. TNF- $\alpha$  participate in the inflammatory response.

### Product Information

**Source:** *Escherichia Coli*.

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

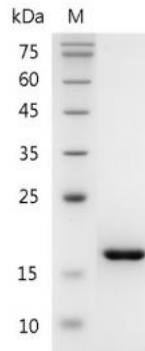
**Biological Activity:** Measure by its ability to induce cytotoxicity in L929 cells in the presence of actinomycin D. The ED<sub>50</sub> for this effect is < 40 pg/mL. The specific activity of recombinant mouse TNF alpha is approximately >2.5x 10<sup>7</sup> IU/mg.

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

**Amino acid sequence:**

MLRSSQNSSDKPVAHVVANHQVEEQLEWLSQRANALLANGMDLKDNLVVPADGLYLVYSQVLFKGGQCPDYVLLTHTVSRFAISYQE  
KVNLISAVKSPCKDTPEGAELKPWYEPYIYLGGVFQLEGDQLSAEVNLPKYLDFAESGQVYFGVIAL with polyhistidine tag at the C-terminus.

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



SDS-PAGE analysis of recombinant mouse TNF alpha

## 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.