Recombinant Human TNFα / Tumor Necrosis Factor alpha, Animal Free & Carrier Free

Cat #: C-CYP213

Size: 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

TNF-α is a kind of pleiotropic proinflammatory 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-α from cells soluble can release homotrimeric TNF-α. TNF- α can bind with some TNF-α receptors induces apoptosis, besides, also trigger other responses depending on cell type, receptor expression, and signal transduction status. TNF-α participate in the inflammatory response.

Product Information

Source: *Escherichia Coli*.

Purity: >97% as determined by SDS-PAGE. Ni-NTA chromatography.

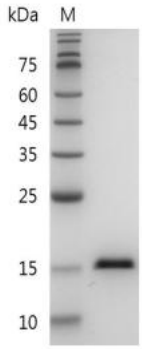
Biological Activity: Measure by its ability to induce cytotoxicity in L929 cells in the presence of actinomycin D. The ED_{50} for this effect is < 0.1 ng/mL. The specific activity of recombinant human TNF alpha is approximately 1 x 10^7 IU/mg

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

Amino acid sequence:

MVRSSSRTPSDKPVAHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVVPSEGLYLIYSQVLFKGQGCPSTHVLLTHTISRIAVSYQTK VNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGIIAL with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 8.0.



SDS-PAGE analysis of recombinant human 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_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 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.