Tumor Necrosis Factor alpha (human, recombinant) (TNF-alpha, TNF-α)

**CATALOG NO.**: 6213  
**SIZE**: 100 µg

**GENERAL INFORMATION**: Tumor necrosis factor is a multifunctional proinflammatory cytokine, with effects on lipid metabolism, coagulation, insulin resistance, endothelial function, autoimmune disease and allergic responses. TNF-β shares 35% identity and 50% homology in amino acid sequence with the TNF-α and it has been shown that the two TNFs share a common receptor on tumor cells.

**DESCRIPTION**: MW=17.5 kDa human, recombinant TNF-alpha. Expressed in *E. coli* as a single, non-glycosylated, polypeptide containing 158 amino acids.

**PURITY**: >98% by SDS-PAGE, RP-HPLC, and FPLC. Endotoxin: Less than 0.1 ng/µg (IEU/µg) of TNF-alpha.

**ACTIVITY**: Fully biologically active. The ED₅₀, as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D, is less then 0.05 ng/ml, corresponding to a Specific Activity of 2 x 10⁷ IU/mg.

**SUPPLIED AS**: Sterile, white lyophilized powder. The protein was lyophilized in 20mM PBS, pH 7.2 and 10mM NaCl.

**RECONSTITUTION**: Reconstitute the lyophilized TNF-alpha in sterile water to a concentration of 100µg/ml or higher, which can then be further diluted into other aqueous solutions.

**STORAGE**: Lyophilized TNF-alpha, although stable at room temperature for 3 weeks, should be stored desiccated at or below -20°C. After reconstitution, TNF-alpha can be stored at 4°C up to 7 days. For longer storage periods, store at or below -20°C. For long term storage, it is recommended that a carrier protein (0.1% HSA or BSA) be added. Avoid freeze/thaw.

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**FOR LABORATORY RESEARCH USE ONLY. NOT FOR HUMAN, DIAGNOSTIC, VETERINARY, OR THERAPEUTIC USE.**

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