



Recombinant Human Tumor Necrosis Factor- α (TNF- α)

Cat. No.: 10062-024

Size: 10 μ g
Store at -20°C.

Description:

Recombinant Human TNF- α , from *E. coli*, is a 17.4-kDa protein containing 157 amino-acid residues. It is a potent lymphoid factor which exerts a wide range of effects on an extensive variety of cell types (1-4). For most *in vitro* applications, TNF- α exerts its biological activity in the concentration range of 0.02 to 1 ng/ml. Recombinant Human TNF- α is provided as a lyophilized protein obtained from a membrane-filtered (0.22 μ m) solution of 3 mM Tris pH 8.0 with no additives.

Directions for Use:

1. Reconstitute in 5 mM Tris pH 8.0 buffers to a concentration of 100 ng/ μ l.
Note: Do not store in glass; store in polypropylene vial. Store at -20°C reconstituted for up to six months. Avoid repeated freeze-thaw cycles.
2. The reconstituted solution can be further diluted in distilled water or aqueous buffers to working concentration. **Do not store dilute solutions.**

Note: To avoid adsorptive loss, dilute solutions should be supplemented with Bovine Serum Albumin (BSA) at a concentration of not less than 0.1%.

Quality Control:

- Purity: $\geq 97\%$ (by SDS-PAGE)
- Endotoxin: ≤ 0.1 ng/ μ g of TNF- α
- Biological Activity: ED₅₀ ≤ 0.05 ng/ml (determined by transformed fibroblasts in the presence of Actinomycin D)
- Specific Activity: $\geq 2 \times 10^7$ units/mg

Doc. Rev.: 070601

This product is distributed for laboratory research only. CAUTION: Not for diagnostic use. The safety and efficacy of this product in diagnostic or other clinical uses has not been established.

For technical questions about this product, call the Invitrogen Tech-LineSM U.S.A. 800 955 6288

References:

1. O'Malley, W.E. *et al.* (1962) *J. Nat'l Cancer Inst.* 29: 1169.
2. Carswell, E.A. *et al.* (1975) *Proc. Nat'l Acad.Sci. USA* 72: 3666.
3. Vilcek, J. *et al.* (1991) *J. Biol. Chem.* 266: 7313.
4. Aggarwal, B.B. *et al.* (1992) Tumor Necrosis Factor. In *Human Cytokines* Eds. B.B. Aggarawal and J.U. Gutterman. Blackwell Scientific Publications, Boston, MA, p.270.