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## RECOMBINANT HUMAN TUMOR NECROSIS FACTOR- $\alpha$

**CATALOG NUMBER:** GF023 **QUANTITY:** 50 μg

LOT NUMBER: SOURCE: E. Coli

**DESCRIPTION:** Tumor Necrosis Factor- $\alpha$  (TNF- $\alpha$ ) is a potent lymphoid factor that exerts cytotoxic effects

on a wide range of tumor cells and certain other target cells. The mature form of human TNF- $\alpha$  has 157 amino acid residues. GF023 is a recombinant polypeptide containing the

mature form of human TNF- $\alpha$  with a polyhistidine tag at its amino terminal.

**PURITY:** Greater than 98% by SDS-PAGE and HPLC analysis. Endotoxin level is less than 0.1 ng

per  $\mu$ g (1EU/ug) of TNF- $\alpha$ .

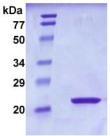
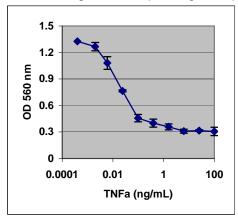


Figure 1: TNF- $\alpha$  on SDS-PAGE

**ACTIVITY:** 

Chemicon's human TNF- $\alpha$ , is fully biologically active when compared to standards. The ED<sub>50</sub> as determined by the cytolysis of mouse L929 cells in the presence of Actinomycin-D is  $\leq 0.05$  ng/mL corresponding to a specific activity of  $\geq 2 \times 10^7$  units/mg.



**Figure 1**, Cytotoxicity of mouse L929 in response to human TNF- $\alpha$ 

**APPLICATIONS:** For most *in vitro* applications, TNF- $\alpha$  exerts its biological activity in the concentration range

of 0.05 to 20.0 ng/mL. Responding cells are (partial list): Tumor cells, certain other cells.

**PRESENTATION:** Lyophilized from 3mM Tris, pH 8.0.





## STORAGE/HANDLING:

The lyophilized powder, though stable at room temperature, is best stored desiccated at -  $20^{\circ}$ C. Reconstitute with H<sub>2</sub>O to a concentration of 0.1-1 mg/mL. *Note: Allow the reconstituted vial to sit at room temperature for 2 hours before use.* This solution can be diluted into other buffered solutions and stored at 4°C for one week or -20°C for future use. Reconstituted TNF- $\alpha$  should be stored in undiluted aliquots at -20°C for up to six months.

Important Note:

During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of  $200 \mu L$  or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

## FOR RESEARCH USE ONLY; NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION

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