

**Product:** Tumor Necrosis Factor-alpha, Murine, Recombinant  
**Catalog #:** 11-TNF-AM  
**Amount:** 10 µg

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**DESCRIPTION:** Recombinant Murine Tumor Necrosis Factor-alpha (rmTNF- $\alpha$ )  
rmTNF- $\alpha$  is a single, non-glycosylated polypeptide chain containing 156 amino acids and having a molecular mass of 17301 Dalton  
The sequence of the first five N-terminal amino acids was determined and was found to be Met-Leu-Arg-Ser-Ser.

**SOURCE:** *Streptomyces lividans*

**PURITY:** Greater than 98.0% as determined by:  
(a) Analysis by RP-HPLC.  
(b) Anion-exchange FPLC.  
(c) Analysis by reducing and non-reducing SDS-PAGE Silver-Stained gel.

**ENDOTOXIN:** Less than 0.1 ng/µg (IEU/µg) of rmTNF- $\alpha$

**DIMERS & AGREGATES:** Less than 1% as determined by silver-stained SDS-PAGE gel analysis

**FORM:** Purified

**PROTEIN CONTENT:** Protein quantitation was carried out by two independent methods:  
1. UV spectroscopy at 280 nm using the absorbency value of 1.082 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences  
2. Analysis by RP-HPLC, using a calibrated solution of murine TNF- $\alpha$  as a Reference Standard.

**STORAGE:** -20°C (aliquot), avoid repeated freeze and thaw cycles.

**BIOLOGICAL ACTIVITY:** rmTNF- $\alpha$  is fully biologically active when compared to standards  
The ED50 as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is < 0.05ng/ml, corresponding to a Specific Activity of  $9 \times 10^8$  IU/mg

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