

**ANTIGENIX AMERICA Inc.**  
**1-800-558-1008**  
**PRODUCT INFORMATION SUMMARY**

**Murine TNF Alpha**

Purified factor	PRODUCT NUMBER RC444020B	20 ug
	RC444020A	5 ug

**DESCRIPTION:**

Mouse Tumor Necrosis Factor Alpha (TNF Alpha) is a cytokine produced by several cell types which exerts cytotoxic effects on many tumor cells and other cell targets. Mouse TNF Alpha has molecular weight of 17.5 kDa with 156 amino acid residues.

**SOURCE:**

E. Coli  
Purity greater than 98% by HPLC analysis  
Endotoxin level < 0.1 ng per ug murine TNF Alpha.

**HANDLING AND STORAGE:**

Provided as lyophilized protein. Mouse TNF Alpha should be reconstituted in distilled water to concentration of 100 ug/mL. Further dilute in PBS or other buffered solutions. This can be stored in small aliquots (**undiluted**) frozen at -20° C. Avoid freeze-thaw cycles. **Microcentrifuge before reconstitution.** Because ANTIGENIX AMERICA factors are provided carrier-protein free, the small quantities of lyophilized protein can adhere to the sides of the vial. **Before opening vial**, we recommend microcentrifuging for 30 seconds to spin-down all material.

**BIOACTIVITY:**

Fully biologically active as compared to standards. Specific activity corresponding to  $1 \times 10^7$  units/mg. Units as determined by cytotoxicity of murine L929 cells in presence of actinomycin D. Bioactivity at concentration range : 0.05 - 20.0 ng/mL.

**WARRANTY:**

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product.

**FOR RESEARCH USE ONLY. NOT FOR THERAPEUTIC OR DRUG USE.**