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## ***Mouse Tumor Necrosis Factor-alpha Recombinant***

Catalog #: 90246-B  
Lot#: 230223

**Description:** Recombinant murine TNF-alpha is a disulfide-linked monomer protein, consisting of 157 amino acids and migrates as an approximately 17 kDa protein under reducing conditions.

**Source:** Optimized DNA sequence encoding mouse TNF- $\alpha$  mature chain was expressed in *E. coli*.

**Formulation:** Lyophilized from a 0.2  $\mu$ m filtered solution (1 mg/ml) containing PBS, pH 7.0.

**Reconstitution:** A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/ml. This solution can then be diluted into other buffers.

**Storage:** The lyophilized protein is stable for at least 2 years from date of receipt when stored at -20°C. Upon reconstitution, store in working aliquots at 2 - 8°C for up to one month, or at -20°C for up to six months, in the presence of a carrier protein. Avoid repeated freeze/thaw cycles.

**Purity:** >97%, as determined by SDS-PAGE and HPLC.

**Endotoxin Level:** Endotoxin level was found to be < 0.1 ng/ $\mu$ g (1EU/ $\mu$ g), using the LAL gel clot method.

**Biological Activity:** The ED50, determined by cytolysis of murine L929 cells in the presence of Actinomycin D is  $\leq$  0.05 ng/ml, corresponding to a specific activity of > 3 x 10<sup>7</sup> units/mg.

**Protein Sequence:**  
LRSSSQNSSDKPVAHVVANHQVEEQL  
EWLSQRANALLANGMDLKDNLVVP  
DGLYLVYSQVLFKGGQCPDYVLLTHT  
VSRFAISYQEKVNLLSAVKSPCKDTP  
EGAELKPWYEPYLGQVLFQLEKGDQL  
SAEVNLPKYLDFAESGQVYF GVIAL

### **References:**

1. Kawai, VK, *et al.* *Curr Opin Rheumatol.* 2012 Sep; **24(5)**:576-585.
2. Santello, M, and Volterra, A. *Trends Neurosci.* 2012 Oct; **35(10)**:638-47.