

## 32-12321: Human Tumor Necrosis Factor-alpha

**Gene :** TNF  
**Gene ID :** 7124  
**Uniprot ID :** P01375  
**Alternative Name :** Tumor necrosis facto, Cachectin, TNF-alpha, Tumor necrosis factor ligand superfamily member 2, NTF

### Description

**Source:** Genetically modified E.coli.

**Predicted MW:** Monomer, 17.5 kDa (158 aa)

Tumor necrosis factor alpha (TNF-alpha) is an inflammatory cytokine secreted by macrophages, monocytes, neutrophils, T cells, and NK-cells following stimulation by bacterial lipopolysaccharide (LPS). TNF-alpha signal activation occurs through two receptors, TNFR1 and TNFR2. TNFR1 is expressed on most cell types, unlike TNFR2, which is expressed mainly on immune cells. TNF-alpha functions to stimulate phagocytosis in macrophages, chemoattract neutrophils, increase insulin resistance, and induce fever.

### Product Info

**Amount :** 50 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at >= 95%  
**Content :** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5  
Sterile water at 0.1 mg/mL  
**Storage condition :** Store at -20°C  
**Amino Acid :** MVRSSSRTPS DKPVAHVVAN PQAEGQLQWL NRRANALLAN GVELRDNQLV VPSEGLYLIY  
SQVLFGQGC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA EAKPWYEPIY  
LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIIAL

### Application Note

**Endotoxin:** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Biological Activity was determined by Cytolysis of mouse L929 cells in the presence of Actinomycin D at <=2 ng/mL; >= 5.0 x 10<sup>5</sup> units/mg. Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vialled to compensate for this loss.

