

## 32-1781: TNF $\alpha$ Recombinant Protein

**Alternative Name :** TNF- $\alpha$ , Tumor necrosis factor ligand superfamily member 2, TNF- $\alpha$ , Cachectin, DIF, TNFA, TNFSF2.

### Description

Source : Escherichia Coli. Tumor Necrosis Factor- $\alpha$  Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 158 amino acids (157 a.a. of the mature human TNF- $\alpha$  and an N-terminal methionine) and having a molecular mass of 17.5kDa. The TNF- $\alpha$  is purified by standard chromatographic techniques. Tumor necrosis factor is a cytokine involved in systemic inflammation and is a member of a group of cytokines that all stimulate the acute phase reaction. TNF is mainly secreted by macrophages. TNF causes apoptotic cell death, cellular proliferation, differentiation, inflammation, tumorigenesis and viral replication, TNF is also involved in lipid metabolism, and coagulation. TNF's primary role is in the regulation of immune cells. Dysregulation and, in particular, overproduction of TNF have been implicated in a variety of human diseases- autoimmune diseases, insulin resistance, and cancer.

### Product Info

<b>Amount :</b>	50 $\mu$ g
<b>Purification :</b>	Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	1mg of TNF- $\alpha$ Human contain 20mM PB, pH-7.2, and 100mM NaCl.
<b>Storage condition :</b>	Lyophilized Tumor Necrosis Factor- $\alpha$ although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TNF- $\alpha$ should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	MVRSSSRTPS DKPVAHVVAN PQAEGLQLWL NRRANALLAN GVELRDNQLV VPSEGLYLIY SQVLFGQGC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA E AKPWYEPIY LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIIAL.

### Application Note

It is recommended to reconstitute the lyophilized Tumor Necrosis Factor- $\alpha$  in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions. The Specific Activity is >5.0 $\times$ 10<sup>7</sup> IU/mg as determined by the cytotoxicity of murine L929 cells in the presence of Actinomycin D.

