

## Recombinant Human TNF

Cat No:HR2R2013

For research use only

### Overview

Quantity	50 ?g
Gene Symbol	TNF
Gene ID	7124
Accession	P01375
Alternative Name	Tumor necrosis factor, Cachectin, TNF, Tumor necrosis factor ligand superfamily member 2, TNF- a Recombinant Human TNF-alpha (TNFA)
Species	Human
Source	CHO cells
Description	Tumor Necrosis Factor is secreted by macrophages, monocytes, neutrophils, T cells, natural killer cells following their stimulation by bacterial lipopolysaccharides. Cells expressing CD4 secrete TNF-alpha while CD8(+) cells secrete little or no TNF-alpha. Stimulated peripheral neutrophilic granulocytes but also unstimulated cells and also a number of transformed cell lines, astrocytes, microglial cells, smooth muscle cells, and fibroblasts also secrete TNF. Human milk also contains this factor. The synthesis of TNF-alpha is induced by many different stimuli including interferons, IL-2, GM-CSF, SP, Bradykinin, immune complexes, inhibitors of cyclooxygenase, and PAF (platelet activating factor). Human TNF-alpha is a non-glycosylated protein of 17 kDa and a length of 157 amino acids. Murine TNF-alpha is N-glycosylated. Homology with TNF-beta is approximately 30%. TNF-alpha forms dimers and trimers.
Functions	The ED(50) was determined by cytolysis of murine L929 cells in the presence of Actinomycin D is ? 0.02 ng/mL, corresponding to a specific activity of > 5.0 x 10 <sup>7</sup> units/mg.
Formulation	TNF-a was lyophilized from a 0.2?m filtered concentrated (1.0 mg/mL) solution in PBS, pH 7.2.
Solubility	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.
Appearance	Lyophilized Powder
Molecular Weight	18
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method.
Shipping Condition	Ambient Temperature

Storage  
Condition

The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

