

# Recombinant Rat TNF

Cat No:HR2R2294

For research use only

## Overview

Quantity	20 ?g
Gene Symbol	TNF
Gene ID	24835
Accession	P16599
Alternative Name	TNF-alpha, Cachectin, Tumor necrosis factor ligand superfamily member 2, TNF-a, Tnfa, Tnfsf2, Tumor necrosis factor  Recombinant Rat Tumor Necrosis Factor Alpha (TNF)
Species	Rat
Source	E. coli
Description	TNF 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 ED50 as determined by the dose-dependent stimulation of the proliferation of monkey 4MBr-5 cells was found to be in the range of 20-40 ng/mL
Formulation	Lyophilized from a 0.2 ?m filtered PBS solution (pH 7.0)
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	17
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.

