



## Product Datasheet

<b>Product Name</b>	Recombinant Human Tumor Necrosis Factor-Alpha
<b>Cata No</b>	CB500125
<b>Source</b>	Escherichia Coli
<b>Synonyms</b>	TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, Cachectin, DIF, TNFA, TNFSF2.

### Description

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.

Tumor Necrosis Factor-a Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 158 amino acids and having a molecular mass of 17483.77 Dalton.

The TNF-alpha is purified by standard chromatographic techniques.

### Purity

Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

### Storage

Lyophilized Tumor Necrosis Factor-a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TNF-a 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.

### Formulation

Sterile Filtered White lyophilized (freeze-dried) powder. 1mg of TNF-alpha Human contain 20mM PBS, pH-7.2, and 10mM NaCl.

### Amino acid sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Val-Arg-Ser-Ser.

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