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## Product Data Sheet

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Product Name: TNF a Human, HEK  
 Cat. No.: GP20966  
 Batch No.: 1

**Product Data**

Purity	>98%	Source	HEK.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.

Synonyms TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a; Cachectin; DIF; TNFA; TNFSF2.

Amino Acid Sequence VRSSSRTPSDKPVAVHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVVPSEGLYLIYSQVLFKGGQCPSTHVLLTHTISRIAVSYQTKVNLLSAIKSPC

Solubility It is recommended to reconstitute the lyophilized TNF-a in sterile water not less than 100µg/ml, which can then be further diluted to

Formulation The TNF-a protein was lyophilized from 1mg/ml in 1xPBS.

**Introduction**

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.

**Biological Activity**

The specific activity was determined by the dose-dependent cytotoxicity of the TNF alpha sensitive cell line L-929 in the presence of Actinomycin D and is typically 0.05-0.5ng/ml.

**Stability**

Lyophilized TNF-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.

**Background**

TNF-a Human Recombinant produced in HEK cells is a glycosylated non-disulfide linked homotrimer, containing 157 and having total Mw of 17kDa.The TNF-a is purified by proprietary chromatographic techniques.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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