

Product: **Animal Free Recombinant Human TNF α**
Cat #: 300-825P
Powder

Description	<p>Tumor Necrosis Factor alpha (TNFα) is an inflammatory cytokine secreted by macrophages, monocytes, neutrophils, T cells, NK-cells following their stimulation by bacterial LPS. TNFα activates signals through two receptors, TNFR1, which is expressed on most cell types, and TNFR2, which is expressed mainly on immune cells. TNFα can have many functions including, to stimulate of phagocytosis in macrophages, to chemoattract neutrophils, to increase insulin resistance and to induce fever. Alternate names: TNFSF2, Cachectin, DIF, Necrosin, Cytotoxin, Cachexin, TNF</p> <p>This product is produced with no animal-derived raw products, animal free equipment and animal free protocols.</p>
MW	Non-glycosylated protein, containing 158 amino acids, with a molecular weight of 17.5 kDa.
Physical Appearance	Sterile filtered white lyophilized (freeze-dried) powder.
Source	<i>E. coli</i>
Formulation	Recombinant human TNF- α is lyophilized from a concentrated solution (1mg/mL) with 10 mM Na ₂ PO ₄ , pH 8.0.
Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.
Stability	Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.
Biological Activity	The activity is determined by the cytolysis of mouse L929 cells in the presence of Actinomycin D and is typically less than 0.05 ng/mL.
Endotoxin Level	Measured by kinetic LAL analysis and is typically \leq 1 EU/ μ g protein.
AA Sequence	MVRSSSRTPS DKPVAHVVAN PQAEGQLQWL NRRANALLAN GVELRDNQLV VPSEGLYLIY SQVLFKGGQC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA EAKPWYEPIY LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIIAL

Purity greater than 96% determined by Reducing and Non-reducing SDS-PAGE.

Protein content determined by Reducing and Non-reducing SDS-PAGE.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!