

# Recombinant Human TNF alpha

Catalog Number: HZ-1014 **HEK293 expressed** **Endotoxin-free** **Animal-component free**

## Technical Specifications

<b>Species:</b> human	<b>Purity:</b> >95%	<b>Formulation:</b> 1x PBS, See Certificate of Analysis for details
<b>Expression:</b> HEK293	<b>Endotoxin:</b> <1 EU/μg	<b>Gene ID:</b> 7124
<b>Activity:</b> Typically ≤ 0.5 ng/mL EC50	<b>Molecular Mass:</b> 17 kDa, non-disulfide bonded homotrimer, glycosylated	

## Reconstitution Buffer

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile <br /> 1xPBS containing 0.1% endotoxin-free recombinant human serum albumin (HSA).

## Stability and Storage

Lyophilized proteins are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at (4°C) for short term or at (-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

## Background

TNF, as also known as TNF-alpha, or cachectin, is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. It is expressed as a 26 kDa membrane-bound protein and free soluble 17 kDa monomer, which forms homotrimers in circulation. It is produced mostly by activated macrophages, CD4+ lymphocytes, NK cells, neutrophils, eosinophils, and neurons. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation (PMID: 20194223).

## Synonyms

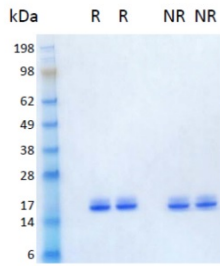
Cachectin, DIF, TNF, TNF a, TNF alpha, TNFA, TNFSF2, Tumor necrosis factor

For technical support and original validation data for this product please contact:

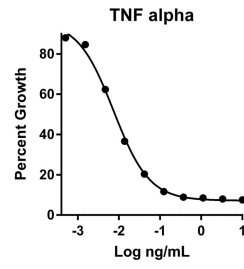
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## Selected Validation Data



The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.



The activity was determined by the dose-dependent cytotoxicity of the TNF alpha sensitive cell line L-929 in the presence of Actinomycin D using Promega CellTiter96® Aqueous Non-Radioactive Cell Proliferation Assay