

# Recombinant Human TNF, His-tagged

**Cat. No.** TNF-72H    **Lot. No.** (See product label)

## SPECIFICATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Product Overview</b>    | Recombinant Human Tumor Necrosis Factor His produced in <i>E. Coli</i> is a single, non-glycosylated, polypeptide chain containing 157 amino acids fragment (77-233) and having a molecular mass of 21.85 kDa with an amino-terminal hexahistidine tag. The TNF-alpha His is purified by standard chromatographic techniques.                                                                                                                                                                                                                                                                                       |
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>              | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Length</b>      | 77-233 a.a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Description</b>         | 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. |
| <b>Physical Appearance</b> | Sterile Filtered clear solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purity</b>              | Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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| <b>Formulation</b>         | TNF-a His is supplied in 10mM Tris, 100mM NaCl/ 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Storage</b>             | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>GENE INFORMATION</b>    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Name</b>           | TNF tumor necrosis factor (TNF superfamily, member 2) [ Homo sapiens ]                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Synonyms</b>            | TNF; tumor necrosis factor (TNF superfamily, member 2); DIF; TNFA; TNFSF2; TNF-alpha; Tumor necrosis factor; Tumor necrosis factor ligand; TNF-a; Cachectin; Tumor necrosis factor, membrane form; Tumor necrosis factor, soluble form; superfamily member 2; OTTHUMP00000029281; OTTHUMP00000037669; cachectin; APC1 protein; TNF superfamily, member 2; TNF, macrophage-derived; TNF, monocyte-derived; Tumor necrosis factor ligand superfamily member 2; tumor necrosis factor (TNF superfamily, member 2); tumor necrosis factor alpha |
| <b>Gene ID</b>             | 7124                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>mRNA Refseq</b>         | NM_000594                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Protein Refseq</b>      | NP_000585                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>MIM</b>                 | 191160                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>UniProt ID</b>          | P01375                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Chromosome Location</b> | 6p21.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Pathway</b>             | Adipocytokine signaling pathway; Allograft rejection; Alzheimer"s disease;                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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Alzheimer"s disease; Amyotrophic lateral sclerosis (ALS); Apoptosis; Asthma; Cytokine-cytokine receptor interaction; Fc epsilon RI signaling pathway; Graft-versus-host disease; Hypertrophic cardiomyopathy (HCM); Hematopoietic cell lineage; MAPK signaling pathway; Natural killer cell mediated cytotoxicity; RIG-I-like receptor signaling pathway; Systemic lupus erythematosus; T cell receptor signaling pathway; TGF-beta signaling pathway; Toll-like receptor signaling pathway; Type I diabetes mellitus; Type II diabetes mellitus; Apoptosis; Hematopoietic cell lineage

**Function**

cytokine activity; identical protein binding; tumor necrosis factor receptor binding

PDB rendering based on 1TNF.

