

# Recombinant Human Tumor Necrosis Factor

**Cat. No.** TNF-194H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant human TNF- $\alpha$ was expressed in <i>E.coli</i> and purified by using conventional chromatography techniques. Additional amino acid, methionine, was attached at N-terminus of the protein. MW=17.5kDa (158 aa).
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	Tumor necrosis factor alpha (TNF- $\alpha$ ), also called cachectin, consists of 157 amino acids. TNF- $\alpha$ is a 17.5kD factor produced by neutrophils, CD4+ T cells, macrophage, NK cells, LAK cells, astrocytes endothelial cells, and smooth muscle cells. TNF- $\alpha$ is cytolytic and plays an important role in immune regulation including hemorrhagic tumor necrosis/cytotoxicity and inflammation, and in regulation of antiviral and immune proliferative and activation responses. The active form of this protein is a trimer.
<b>Amino Acids Sequences</b>	MVRSSSRTPS DKPVAHVVAN PQAEGQLQWL NRRANALLAN GVELRDNQLV VPSEGLYLIY SQVLFKGGQC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA EAKPWYEPIY LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIIAL
<b>Purity</b>	> 95% by SDS-PAGE.
<b>Concentration</b>	1mg/ml (determined by Bradford assay).

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Form</b>	Liquid. In PBS buffer (pH7.4).
<b>Endotoxin Level</b>	< 1.0EU per 1 µg of protein (determined by LAL method).
<b>Storage</b>	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing 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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Pathway**

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.**



 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA