

## Tumor Necrosis Factor-alpha Active Protein | mTNF a active protein

Recombinant Mouse Tumor Necrosis Factor-alpha

|                              |                       |
|------------------------------|-----------------------|
| CATALOG #<br><b>AAA38134</b> | HOST<br><b>E Coli</b> |
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### PRODUCT SYNONYMS

Tumor Necrosis Factor-alpha; Recombinant Mouse Tumor Necrosis Factor-alpha; TNF a Mouse; Tumor Necrosis Factor-Alpha Mouse Recombinant; TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a; Cachectin; DIF; TNFA; TNFSF2; mTNF a active protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                            |
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| Host                    | E Coli                                                                                                                                                                                                                                                                                                                                                                                     |
| Purity/Purification     | Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (c) Analysis by SDS-PAGE.                                                                                                                                                                                                                                                                                                    |
| Form/Format             | Lyophilized from a 0.2 um filtered concentrated solution in PBS, pH 7.2.<br>Sterile Filtered White lyophilized (freeze-dried) powder.                                                                                                                                                                                                                                                      |
| Sequence                | MLRSSSQNSS DKPVAHVVAN HQVEEQLEWL SQRANALLAN GMDLKDNQLV VPADGLYLVY SQVLFKGQGC<br>PDYVLLTHTV SRFAISYQEK VNLLSAVKSP CPKDTPEGAE LKPWYEPIYL GGVFQLEKGD QLSAEVNLPK<br>YLDFAESGQV YFGVIAL                                                                                                                                                                                                         |
| Sequence Length         | 219                                                                                                                                                                                                                                                                                                                                                                                        |
| Solubility              | It is recommended to reconstitute the lyophilized Tumor Necrosis Factor-alpha in sterile 18Momega-cm H2O not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.                                                                                                                                                                                            |
| Protein Content         | Protein quantitation was carried out by two independent methods1. UV spectroscopy at 280 nm using the absorbency value of 1.24 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a calibrated solution of TNF-a as a Reference Standard. |
| Biological Activity     | The ED50 as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is < 0.1ng/ml, corresponding to a Specific Activity of 10,000,000 Units/mg.                                                                                                                                                                                                                  |
| Preparation and Storage | Lyophilized Tumor Necrosis Factor-a although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution TNF-a should be stored at 4 degree C between 2-7 days and for future use below -18 degree C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.                 |

### ADDITIONAL INFORMATION

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| Related Product Information for mTNF a active protein | <p><b>Description:</b> Tumor Necrosis Factor-a Mouse Recombinant produced in E Coli is a single, non glycosylated, polypeptide chain containing 157 amino acids and having a molecular mass of 17301.32 Dalton. The TNF-alpha is purified by standard chromatographic techniques.</p> <p><b>Introduction:</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.</p> |
| Product Categories/Family for mTNF a active protein   | Cytokines and Growth Factors; Cytokines; Tumor Necrosis Factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                  |
|----------------------------------|------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 518831589                                                                                                        |
| NCBI GeneID                      | 21926                                                                                                            |
| NCBI Accession #                 | NP_001265530.1                                                                                                   |
| NCBI GenBank Nucleotide #        | NM_001278601.1                                                                                                   |
| UniProt Accession #              | P06804; O35853; Q62326; Q91VF3                                                                                   |
| Molecular Weight                 | 25,896 Da                                                                                                        |
| NCBI Official Full Name          | tumor necrosis factor isoform 2                                                                                  |
| NCBI Official Synonym Full Names | tumor necrosis factor                                                                                            |
| NCBI Official Symbol             | Tnf                                                                                                              |
| NCBI Official Synonym Symbols    | DIF; Tnfa; TNF-a; TNFSF2; Tnfsf1a; TNFalpha; TNF-alpha                                                           |
| NCBI Protein Information         | tumor necrosis factor; cachectin; tumor necrosis factor ligand superfamily member 2; tumor necrosis factor-alpha |
| UniProt Protein Name             | Tumor necrosis factor                                                                                            |
| UniProt Gene Name                | <b>Tnf</b>                                                                                                       |
| UniProt Synonym Gene Names       | Tnfa; Tnfsf2; TNF-a; NTF; ICD1; ICD2                                                                             |
| UniProt Entry Name               | TNFA_MOUSE                                                                                                       |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/e-coli-mtnf-a-active-protein/tumor-necrosis-factor-alpha/38134>