

## Active Recombinant Mouse Tnf Protein

**Cat. No.** Tnf-733M    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <b>Product Overview</b> | Recombinant Mouse Tnf Protein without tag was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Description</b>      | <p>Tumor necrosis factor alpha (TNF-<math>\alpha</math>), also called cachectin, is the best-know member of the TNF-family, which can cause cell death. This protein is produced by neutrophils, activated lymphocytes, macrophages, NK cells, LAK cells, astrocytes endothelial cells, smooth muscle cells and some transformed cells. TNF-<math>\alpha</math> occurs as a secreted, soluble form and as a membrane-anchored form, both of which are biologically active. The naturally-occurring form of TNF-<math>\alpha</math> is glycosylated, but non-glycosylated recombinant TNF-<math>\alpha</math> has comparable biological activity. The biologically active native form of TNF-<math>\alpha</math> is reportedly a trimer. Human and murine TNF-<math>\alpha</math> show approximately 79 % homology at the amino acid level and cross-reactivity between the two species. Two types of receptors for TNF-<math>\alpha</math> have been described and virtually all cell types studied show the presence of one or both of these receptor types.</p> |
| <b>Form</b>             | Sterile Filtered White lyophil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Bio-activity</b>     | Fully biologically active when compared to standard. The ED50 as determined by a cytotoxicity assay using murine L929 cells is less than 0.1 ng/mL, corresponding to a specific activity of $> 1.0 \times 10^7$ IU mg in the presence of actinomycin D.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

 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

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|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b> | Approximately 17.4 kDa. The re                                                                                                                                                                                                                                                                                                                                                                |
| <b>AA Sequence</b>    | MLRSSSQNSSDKPVAHVVANHQVEEQLEWLSQRANALLANGMDLKDNQLVVPADG<br>LYLVYSQVLFGKGQCPDYVLLTHTVSRFAISYQEKVNLLSAVKSPCPKDTPEGAELK<br>PWYEPIYLGGVFQLEKGDQLSAEVNLPKYLDFAESGQVYFGVIAL                                                                                                                                                                                                                         |
| <b>Endotoxin</b>      | Less than 1 EU/ag of rMuTNF-a as determined by LAL method.                                                                                                                                                                                                                                                                                                                                    |
| <b>Purity</b>         | > 98% by SDS-PAGE and HPLC analyses.                                                                                                                                                                                                                                                                                                                                                          |
| <b>Storage</b>        | This lyophilized preparation is stable at 2-8 centigrade, but should be kept at -20 centigrade for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 centigrade. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 to -70 centigrade. Avoid repeated freeze thaw cycles. |
| <b>Storage Buffer</b> | Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.2.                                                                                                                                                                                                                                                                                                                                   |
| <b>Reconstitution</b> | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL.                                                                                                                                                                  |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                   |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Tnf tumor necrosis factor [ Mus musculus (house mouse) ]                                                                                                                                                                          |
| <b>Official Symbol</b> | Tnf                                                                                                                                                                                                                               |
| <b>Synonyms</b>        | TNF; tumor necrosis factor; TNF-a; TNF alpha; cachectin; tumor necrosis factor alpha; tumor necrosis factor-alpha; tumor necrosis factor ligand superfamily member 2; DIF; Tnfa; TNFSF2; Tnfsf1a; TNFalpha; TNF-alpha; MGC151434; |

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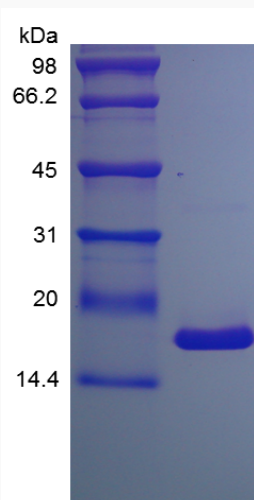
**Gene ID** 21926

**mRNA Refseq** NM\_013693

**Protein Refseq** NP\_038721

**UniProt ID** P06804

**SDS-PAGE**



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