



# Recombinant Human Tumor necrosis factor (TNF), partial (Active)

|                            |   |
|----------------------------|---|
| <b>Product Code</b>        | CSB-YP023955HU  |
| <b>Relevance</b>           | Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Impairs regulatory T-cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Upregulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective. Key mediator of cell death in the anticancer action of BCG-stimulated neutrophils in combination with DIABLO/SMAC mimetic in the RT4v6 bladder cancer cell line. The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells. |
| <b>Storage</b>             | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.   |
| <b>Uniprot No.</b>         | P01375  |
| <b>Storage Buffer</b>      | Tris-based buffer,50% glycerol  |
| <b>Product Type</b>        | Others  |
| <b>Immunogen Species</b>   | Homo sapiens (Human)  |
| <b>Biological Activity</b> | Measured in a cytotoxicity assay using L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED50 for this effect is 33.32-47.38 pg/mL.  |
| <b>Purity</b>              | Greater than 90% as determined by SDS-PAGE.   |
| <b>Sequence</b>            | VRSSSRTPSDKPVAVHVVANPQAEQQLQWLNRRANALLANGVELRDNQLVVP<br>SEGLYLIYSQVLFKGGQCPSTHVLLTHTISRIAVSYQTKVNLLSAIKSPCQRETP<br>EGAEAKPWYEPYIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGIIAL   |
| <b>Lead Time</b>           | 3-7 business days   |
| <b>Research Area</b>       | Immunology  |
| <b>Source</b>              | Yeast   |
| <b>Gene Names</b>          | TNF   |
| <b>Expression Region</b>   | 77-233aa  |
| <b>Notes</b>               | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.   |

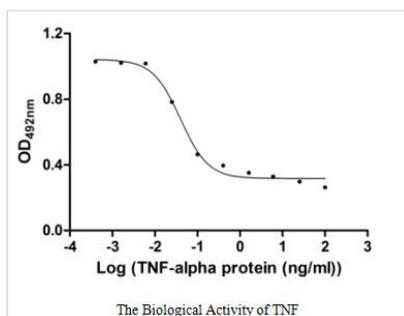


**Tag Info** N-terminal 6xHis-tagged

**Mol. Weight** 19.4 kDa

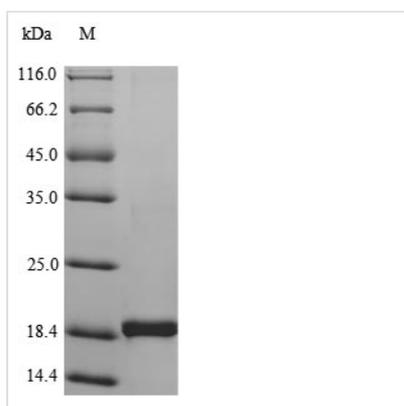
**Protein Description** Partial

**Image**



**Activity**

Measured in a cytotoxicity assay using L929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The EC<sub>50</sub> for this effect is 33.32-47.38 pg/mL.



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

**Description**

Introducing Recombinant Human TNF, a high-quality protein designed for use in immunology research. This partial-length protein encompasses the 77-233aa expression region of Tumor necrosis factor, also known as Cachectin or TNF-alpha. Expressed in yeast and equipped with an N-terminal 6xHis-tag for easy purification, this protein is perfect for researchers requiring a reliable and effective TNF source.

Our Recombinant Human TNF boasts a purity of greater than 90%, as confirmed by SDS-PAGE, providing assurance that the protein will deliver optimal results in your experiments. While endotoxin levels have not been tested, the activity of this protein has been measured in a cytotoxicity assay using L929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED<sub>50</sub> for this effect is 33.32-47.38 pg/mL, indicating high biological potency.

Provided as a lyophilized powder, Recombinant Human TNF ensures convenient storage and use for a variety of experimental setups, making it an excellent choice for your research needs.