



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

Product Code	CSB-YP023955HU
Relevance	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.
Abbreviation	Recombinant Human TNF protein, partial (Active)
Storage	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.
Uniprot No.	P01375
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Others
Immunogen Species	Homo sapiens (Human)
Biological Activity	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.
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	VRSSSRTPSDKPVAHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVVP SEGLYLIYSQVLFKGGQCPSTHVLLTHTISRIAVSYQTKVNLLSAIKSPCQRETP EGAEAKPWYEPIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGIIAL
Research Area	Immunology
Source	Yeast
Target Names	TNF
Expression Region	77-233aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

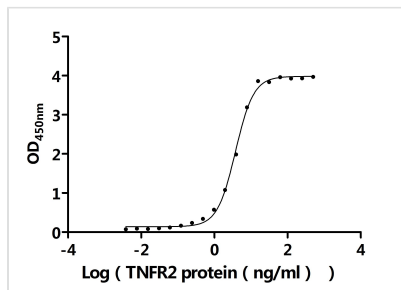


Tag Info N-terminal 6xHis-tagged

Mol. Weight 19.4 kDa

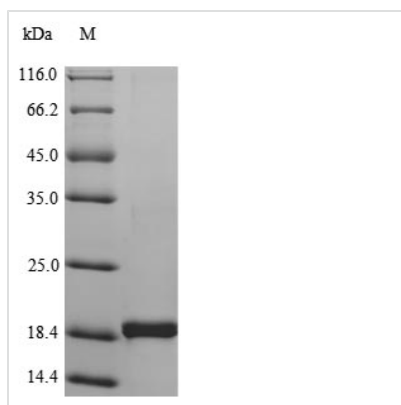
Protein Length Partial

Image



Activity

Measured by its binding ability in a functional ELISA. Immobilized Human TNF at 5 µg/ml can bind Human TNFR2 protein (CSB-MP023978HU2). The EC₅₀ is 3.470-4.107 ng/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 ED₅₀ 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.

Shelf Life

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