



Human Tumor necrosis factor alpha (TNF- α) Protein, Recombinant

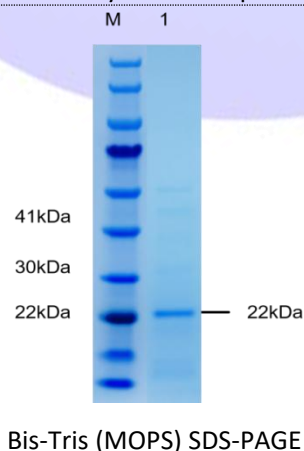
I. For sale

Product name	Catalog #	Size
Human Tumor necrosis factor alpha (TNF- α) Protein, Recombinant	P01T0008	10ug
		50ug
		500ug
		1mg

II. Product Description

Other Names	DIF; TNFA; TNFSF2; TNLG1F; TNF-alpha
Protein & NCBI Number	P01375, NM_000594.4
Host	E.coli
Express Region	Met1-Leu233
Protein Sequence	MSTESMIRDVELAEEALPKKTGGPQGSRRCLFLSLFSFLIVAGATTLFCLLHFGVIGPQREEFPR DLSLISPLAQAVRSSSRTPSDKPVAVHVVANPQAEGQLQWLNRRANALLANGVELRDNQLVV PSEGLYLIYSQVLFKGQGCPSTHVLLTHTISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYE PIYLGGVFQLEKGDRLSAEINRPDYLDFAESGQVYFGIIAL
Molecular Weight	The protein molecule consists of 238 amino acids (including the fusion tag), with a predicted molecular weight of 26.3kDa and an actual molecular weight of 22kDa.
Fusion Tag	None
Purity	≥80% SDS-PAGE
Physical Property	Liquid
Components	0.01M PBS+20% glycerol, sterile solution.
Storage & Stability	After aliquoting, the stability of the samples can be maintained for up to 6 months at -20°C to -80°C, avoiding repeated freeze-thaw cycles.
Applications	Antibody preparation, immunoassay (ELISA, WB), subcellular localization and interaction protein identification, etc.
Lead Time	5 to 10 business days; 2 to 3 days for stock products

Figure. SDS-PAGE





III. Storage and Transportation

Transport at 2-8°C, product is stable for up to twelve months from date of receipt under sterile conditions at -20°C to -80°C.

IV. Background

TNF- α (tumor necrosis factor) gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, psoriasis, rheumatoid arthritis ankylosing spondylitis, tuberculosis, autosomal dominant polycystic kidney disease, and cancer. Mutations in this gene affect susceptibility to cerebral malaria, septic shock, and Alzheimer disease. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

VI. References

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3. Jongseok Lee, Jami L. Saloman, Gustave Weiland, Q-Schick Auh, Man-Kyo Chung, Jin Y. Ro. Functional interactions between NMDA receptors and TRPV1 in trigeminal sensory neurons mediate mechanical hyperalgesia in the rat masseter muscle. *Pain*. 2012 Jul;153(7):1514-1524.
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6. AGGARWAL, NATARAJAN B B K. Tumor necrosis factors: Developments during the last decade. *Eur Cytokine Netw*, 1996, 7 (2) : 93-124.