

Product datasheet for **TP723708**

TNF alpha (TNF) (NM_000594) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human tumor necrosis factor (TNF)
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Human TNF-alpha;, the region of Val77-Leu233, from gene Accession# NM_000594
Tag:	Tag Free
Predicted MW:	17 kDa
Concentration:	lot specific
Purity:	Purity is >98%, as determined by Coomassie stained SDS-PAGE.
Buffer:	10 mM NaH ₂ PO ₄ , 150 mM NaCl, pH 7.2
Bioactivity:	The ED50 is 0.020-0.050 ng/ml, corresponding to a specific activity of 5-2 X10 ⁷ units/mg, determined by a dose dependent stimulation of L929 cells treated with actinomycin D.
Endotoxin:	Less than 0.01 ng per ug protein as determined by the LAL method
Storage:	Store at -80°C.
Stability:	Unopened vial can be stored between 2°C and 8°C for up to 2 weeks, at -20°C for up to 6 months, or at -70°C or below until the expiration date. Aliquots can be stored between 2°C and 8°C for up to one week and stored at -20°C or colder for up to 3 months. Avoid repeated freeze/thaw cycles.
RefSeq:	NP_000585
Locus ID:	7124
UniProt ID:	P01375
RefSeq Size:	1686
Cytogenetics:	6p21.33
RefSeq ORF:	699
Synonyms:	DIF; TNF-alpha; TNFA; TNFSF2; TNLG1F



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Summary:

This 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/TNFR. 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. [provided by RefSeq, Aug 2020]

Protein Families:

Druggable Genome, Secreted Protein, Transcription Factors, Transmembrane

Protein Pathways:

Adipocytokine signaling pathway, Allograft rejection, Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Asthma, Cytokine-cytokine receptor interaction, Dilated cardiomyopathy, Fc epsilon RI signaling pathway, Graft-versus-host disease, Hematopoietic cell lineage, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway, Natural killer cell mediated cytotoxicity, NOD-like receptor signaling pathway, RIG-I-like receptor signaling pathway, Systemic lupus erythematosus, T cell receptor signaling pathway, TGF-beta signaling pathway, Toll-like receptor signaling pathway, Type I diabetes mellitus, Type II diabetes mellitus

Product images: