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Product datasheet for SA6055

Tumor necrosis factor (TNF-alpha) (77-233) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Tumor necrosis factor (TNF-alpha) (77-233) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MVRSSSRTPS DKPVAHVVAN PQAEGQLQWL NRRANALLAN GVELRDNQLV VPSEGLYLIY SQVLFKGQGC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA EAKPWYEPIY LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIIAL
Predicted MW:	17.5 kDa
Concentration:	lot specific
Purity:	>95% by SDS-PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: PBS, pH 7.4
Bioactivity:	Biological: Measured in a cytotoxicity assay using L929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D. The ED50 for this effect is < 0.16 ng/ml.
Endotoxin:	< 1.0 EU per 1 µg of protein (determined by LAL method)
Preparation:	Liquid purified protein
Applications:	Protocol: **Activity Assay** 1. L929 cytotoxicity assay using actinomycin D 2. Cell Number: 2 x 10e4 cells/well 3. Incubation: 24hr after sample treatment 4. Assay Media: 5% FBS media 5. Cytokine Concentration: 12 pg/ml - 25 ng/ml 6. Detection method : MTT assay
Protein Description:	The active form of this protein is a trimer. Recombinant human TNF-α was expressed in E. coli. Additional amino acid, Methionine, was attached at N-terminus of the protein.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.

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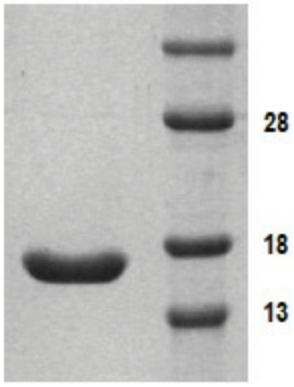
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000585
Locus ID:	7124
UniProt ID:	P01375
Cytogenetics:	6p21.33
Synonyms:	TNF, TNF-a, TNFA, TNFSF2, Cachectin
Summary:	This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. 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:	Protocol: **Activity Assay** 1. L929 cytotoxicity assay using actinomycin D 2. Cell Number: 2 x 10e4 cells/well 3. Incubation: 24hr after sample treatment 4. Assay Media: 5% FBS media 5. Cytokine Concentration: 12 pg/ml - 25 ng/ml 6. Detection method : MTT assay
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:



15% SDS-PAGE (3ug)