

Product datasheet for TP721024L

OriGene Technologies, Inc.

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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

Val77-Leu233

or AA Sequence:

Tag: C-His

Predicted MW: 18.5 kDa

Concentration: lot specific

Purity: >95% as determined by SDS-PAGE and Coomassie blue staining

Buffer: Provided lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl

Endotoxin: Endotoxin level is < 0.1 ng/µg of protein (< 1 EU/µg)

Reconstitution Method: Always centrifuge tubes before opening. Do not mix by vortex or pipetting. Dissolve the

lyophilized protein in ddH2O. It is not recommended to reconstitute a concentration less than 100 µg/ml. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Storage: Store at -80°C.

Stability: Stable for at least 6 months from date of receipt under proper storage and handling

conditions.

RefSeq: NP 000585

Locus ID: 7124

UniProt ID: <u>P01375</u>, <u>Q5STB3</u>

RefSeq Size: 1686

Cytogenetics: 6p21.33

RefSeq ORF: 699

Synonyms: DIF; TNF-alpha; TNFA; TNFSF2; TNLG1F





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:

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