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TNF-α

Catalog # PVGS1508

Product Information

Primary Accession	P06804
Species	Mouse
Sequence	Leu80-Leu235
Purity	> 98% as analyzed by SDS-PAGE > 98% as analyzed by HPLC
Endotoxin Level	
Expression System	E. coli
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 □g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	21926
Other Names	Tumor necrosis factor, Cachectin, TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, Tumor necrosis factor, membrane form, N-terminal fragment, NTF, Intracellular domain 1, ICD1, Intracellular domain 2, ICD2, C-domain 1, C-domain 2, Tumor necrosis factor, soluble form, Tnf, Tnfa, Tnfsf2
Target Background	Tumor Necrosis Factor-Alpha (TNF-alpha) plays a major role in growth regulation, differentiation, inflammation, viral replication, tumorigenesis, and autoimmune disease. Besides inducing hemorrhagic necrosis of tumors, TNF has been found to be involved in tumorigenesis, tumor metastasis, viral replication, septic shock, fever, inflammation, and autoimmune diseasesuch as Crohn's disease, rheumatoid arthritis and graft-versus-host disease. TNF alpha-1a is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells and certain other target cells.

Protein Information

Name	Tnf
Synonyms	Tnfa, Tnfsf2
Function	Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. 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 (By similarity). Induces insulin resistance in adipocytes via inhibition of insulin-induced IRS1 tyrosine phosphorylation and insulin-induced glucose uptake. Induces GKAP42 protein degradation in adipocytes which is partially responsible for TNF-induced insulin resistance (PubMed:25586176). Plays a role in angiogenesis by inducing VEGF production synergistically with IL1B and IL6 (By similarity). Promotes osteoclastogenesis and therefore mediates bone resorption (PubMed:32741026).
Cellular Location	Cell membrane; Single-pass type II membrane protein [Tumor necrosis factor, soluble form]: Secreted. [C-domain 2]: Secreted.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.