

Rev03 DATASHEET

Update: Dec,14,2021

TNF-α, Human (P. pastoris-expressed)

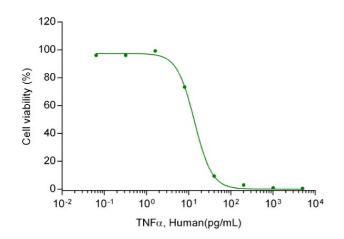
Cat. No.: Z02682

Product Introduction

Species	Human
Protein Construction	TNF-α (Val77-Leu233) Accession # P01375
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 1 EU/µg of protein by gel clotting method
Biological Activity	ED $_{50}$ < 0.08 ng/ml, measured in a cytotoxicity assay using L-929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D, corresponding to a specific activity of > 1.25 \times 10 7 units/mg.
Expression System	P. pastoris
Apparent Molecular Weight	~17.4 kDa, on SDS-PAGE under reducing conditions.
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 ₂ O up to 100 μg/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.

Examples





ED $_{50}$ <0.08ng/ml, measured in a cytotoxicity assay using L-929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D, corresponding to a specific activity of >1.25 x 10^7 units/mg.

Background

Target Background: Tumor Necrosis Factor-Alpha (TNF-alpha) plays a major role in growth regulation, differentiation, inflammation, viral replication, tumorigenesis, and autoimmune diseases. 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 diseases including Crohn's disease, and rheumatoid arthritis as well as 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.

Synonyms: TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a; Cachectin; DIF; TNFA; TNFSF2

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.