

Rev03  
Update: Dec,14,2021

**DATASHEET**

# TNF- $\alpha$ , Bovine

Cat. No.: Z03316

## Product Introduction

<b>Species</b>	Bovine
<b>Protein Construction</b>	<b>TNF-<math>\alpha</math> (Ieu78-Ieu234) Accession # Q06599</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
<b>Endotoxin Level</b>	< 0.2 EU/ $\mu$ g of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 0.1 $\mu$ g/ml, measured in a cytotoxicity assay using mouse L-929 cells in the presence of actinomycin D, corresponding to a specific activity of > 1.0 $\times$ 10 <sup>4</sup> units/mg.
<b>Expression System</b>	E. coli
<b>Apparent Molecular Weight</b>	~17.6 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	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 <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
<b>Storage &amp; Stability</b>	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.

## Background

**Target Background :** Tumor Necrosis Factor-Alpha (TNF- $\alpha$ ) plays a major role in regulating growth, differentiation, inflammation, viral replication, tumorigenesis, and autoimmune diseases. TNF alpha-1a is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells. In addition to inducing hemorrhagic necrosis of tumors, studies indicate TNF is involved in tumor igenesis, tumor metastasis, viral replication, septic shock, fever, inflammation, Crohn's disease, rheumatoid arthritis and graft-versus-host disease.

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

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