

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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### **DATA SHEET**

## GFH111AF Recombinant Human TNF- $\alpha$ (Animal-Free)

#### Description

Tumor Necrosis Factor  $\alpha$  (TNF- $\alpha$ ) is an inflammatory cytokine secreted by macrophages, monocytes, neutrophils, T cells, and Natural Killer (NK) cells following stimulation by bacterial lipopolysaccharide (LPS). TNF- $\alpha$  signal activation occurs through two receptors, TNFR1 and TNFR2. TNFR1 is expressed on most cell types, unlike TNFR2, which is expressed mainly on immune cells. TNF- $\alpha$  functions to stimulate phagocytosis in macrophages, chemoattract neutrophils, increase insulin resistance, and induce fever.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

Length158 aaMolecular Weight17.5 kDaSourceE. coliAccession NumberP01375

Purity ≥95% determined by reducing and non-reducing SDS-PAGE

#### **Specifications**

**Alternative Names** Tumor Necrosis Factor α, TNFa, TNFSF2, cachectin, DIF, necrosin, cytotoxin, cachexin, TNF

 $\textbf{Biological Activity} \qquad \qquad \text{Human TNF-} \alpha \text{ (Animal-Free) is fully biologically active when compared to standard. The activity is determined }$ 

by the cytolysis of mouse L929 cells in the presence of Actinomycin D and it is typically less than 2 ng/ml. This

corresponds to an expected specific activity of 5.0 x 10<sup>5</sup> units/mg.

Endotoxin Level ≤1.00 EU/µg as measured by kinetic LAL

Formulation Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, pH 7.5

AA Sequence MVRSSSRTPS DKPVAHVVAN PQAEGQLQWL NRRANALLAN GVELRDNQLV VPSEGLYLIY

SQVLFKGQGC PSTHVLLTHT ISRIAVSYQT KVNLLSAIKS PCQRETPEGA EAKPWYEPIY

LGGVFQLEKG DRLSAEINRP DYLDFAESGQ VYFGIIAL

#### **Preparation and Storage**

**Reconstitution**Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the

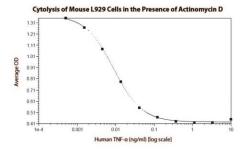
vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/ml, which can be further diluted into other aqueous solutions.

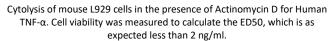
Stability and Storage 12 months from date of receipt when stored at -20°C to -80°C as supplied.

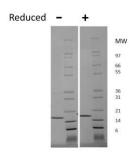
1 month when stored at 4°C after reconstituting as directed.

Avoid freeze-thaw cycles

#### Data







Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1  $\mu g$  of protein was loaded in each lane. Human TNF- $\alpha$  has a predicted Mw of 17.5 kDa.