

PRODUCT INFORMATION

Target	TNFA
Synonyms	DIF;TNF-alpha;TNFA;TNFSF2;cachexin;cachectin;TNFα
Description	Recombinant human TNFa protein with C-terminal 6×His tag
Delivery	In Stock
Uniprot ID	P01375
Expression Host	HEK293
Tag	C-6×His Tag
Molecular Characterization	TNFα(Arg78-Leu233) 6×His tag
Molecular Weight	The protein has a predicted molecular mass of 18.1 kDa after removal of the signal peptide.
Purity	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
Storage & Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	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/TNFR. 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, and cancer. Knockout studies in mice also suggested the neuroprotective function of this cytokine.
Usage	Research use only
Conjugate	Unconjugated



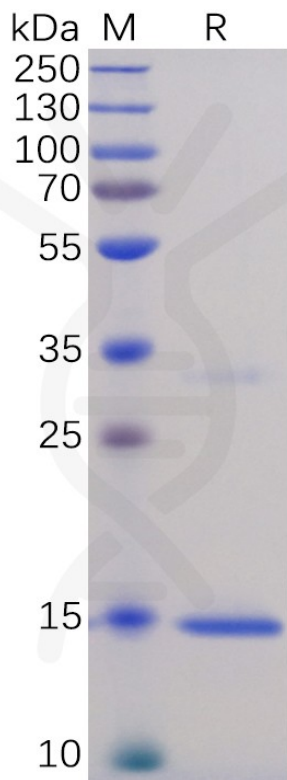


Figure 1. Human TNFα Protein, His Tag on SDS-PAGE under reducing condition.

**Human TNFa, His Tagged protein ELISA**

0.1μg of Human TNFa, His Tagged protein per well

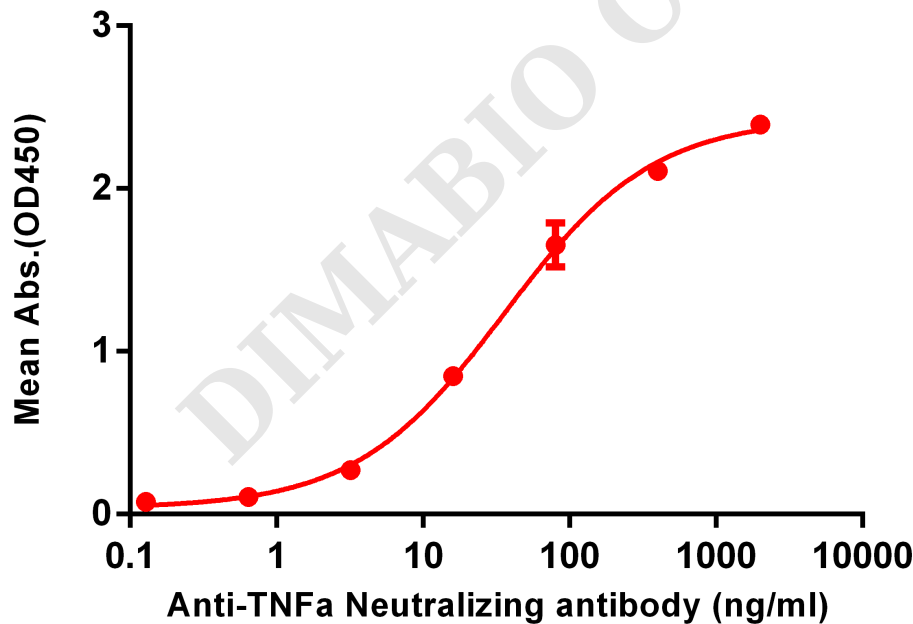


Figure 2.ELISA plate pre-coated by 1 μg/ml (100 μl/well) Human TNFa , His tagged protein (PME100076) can bind Anti-TNFa Neutralizing antibody ([getskuurl sku="BME100056"]) in a linear range of 0.64-16 ng/ml.



**Human TNF $\alpha$ , His Tagged protein ELISA**  
0.2  $\mu$ g of Human TNF $\alpha$ , His tagged protein per well

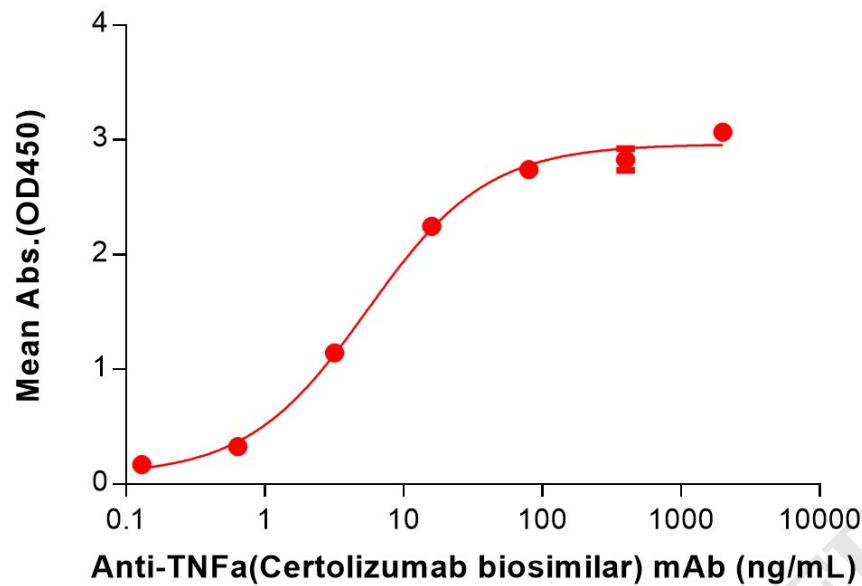


Figure 3. ELISA plate pre-coated by 2  $\mu$ g/mL (100  $\mu$ L/well) Human TNF $\alpha$  Protein, His Tag (PME100076) can bind Anti-TNF $\alpha$  (Certolizumab biosimilar) mAb (BME100183) in a linear range of 0.64–16 ng/mL.

**Human TNF $\alpha$ , His Tagged protein ELISA**  
0.2  $\mu$ g of Human TNF $\alpha$ , His tagged protein per well

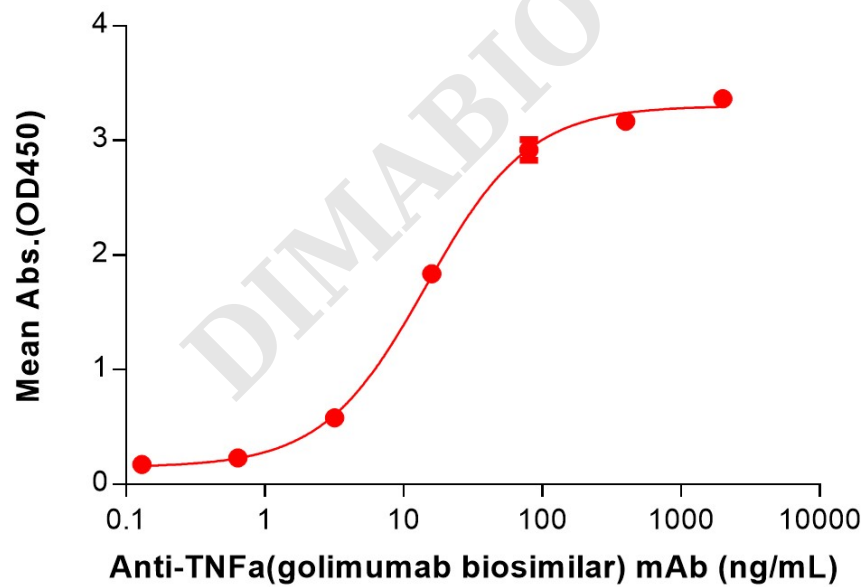


Figure 4. ELISA plate pre-coated by 2  $\mu$ g/mL (100  $\mu$ L/well) Human TNF $\alpha$  Protein, His Tag (PME100076) can bind Anti-TNF $\alpha$  (golimumab biosimilar) mAb (BME100179) in a linear range of 3.20–80 ng/mL.

