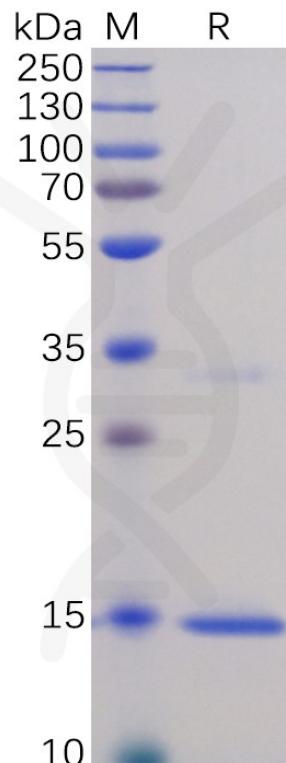


## PRODUCT INFORMATION

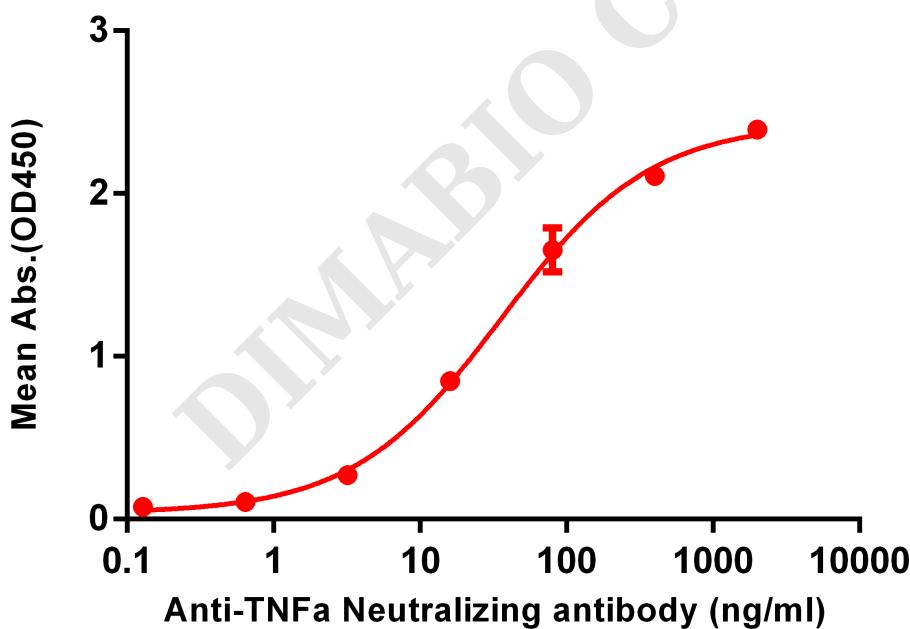
<b>Target</b>	TNFA
<b>Synonyms</b>	DIF;TNF-alpha;TNFA;TNFSF2;cachexin;cacheitin;TNF $\alpha$
<b>Description</b>	Recombinant human TNFa protein with C-terminal 6 $\times$ His tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P01375
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-6 $\times$ His Tag
<b>Molecular Characterization</b>	TNF $\alpha$ (Arg78-Leu233) 6 $\times$ His tag
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 18.1 kDa after removal of the signal peptide.
<b>Purity</b>	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	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.
<b>Storage&amp;Shipping</b>	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.
<b>Background</b>	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/TNFB. 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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



Figure 1. Human TNF $\alpha$  Protein, His Tag on SDS-PAGE under reducing condition.

### Human TNF $\alpha$ , His Tagged protein ELISA

0.1 $\mu$ g of Human TNF $\alpha$ , His Tagged protein per well

Figure 2. ELISA plate pre-coated by 1  $\mu$ g/ml (100  $\mu$ l/well) Human TNF $\alpha$ , His tagged protein (PME100076) can bind Anti-TNF $\alpha$  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

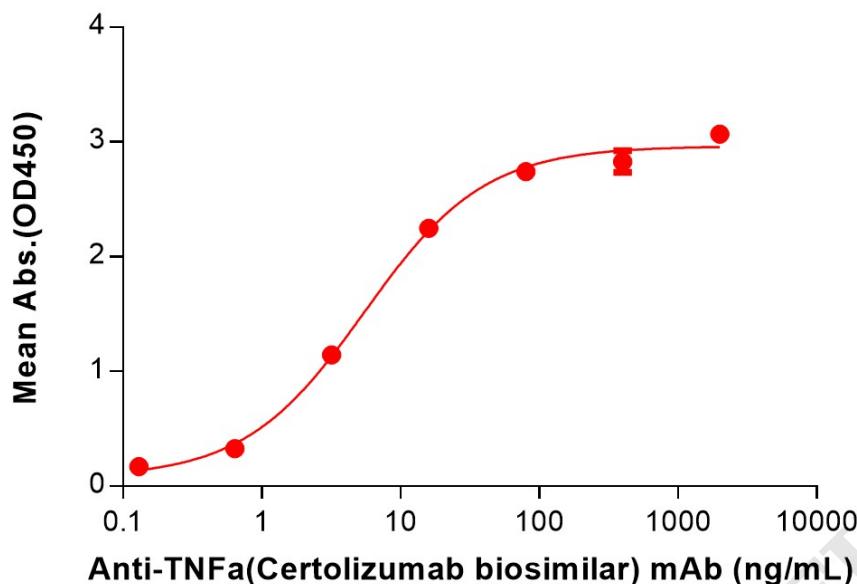


Figure 3. ELISA plate pre-coated by 2  $\mu$ g/mL (100  $\mu$ L/well) Human TNF $\alpha$  Protein, His Tag (PME100076) can bind Anti-TNF $\alpha$ (Certolizumab biosimilar) mAb (BME100183) in a linear range of 0.64-16 ng/mL.

### Human TNF $\alpha$ , His Tagged protein ELISA

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

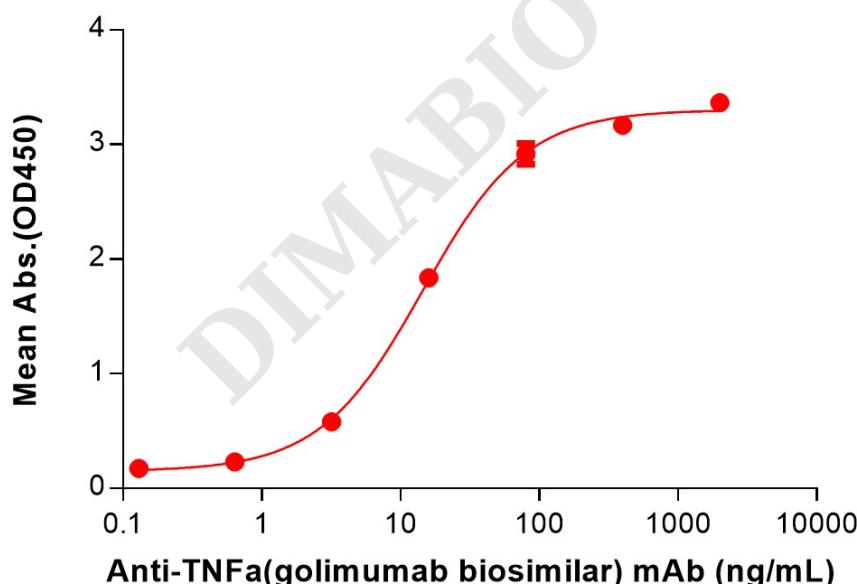


Figure 4. ELISA plate pre-coated by 2  $\mu$ g/mL (100  $\mu$ L/well) Human TNF $\alpha$  Protein, His Tag (PME100076) can bind Anti-TNF $\alpha$ (golimumab biosimilar) mAb (BME100179) in a linear range of 3.20-80 ng/mL.

