



Catalog Number: 10602-MM0N1

General Information	
<b>Immunogen:</b>	Recombinant Human TNF-alpha / TNFA Protein (Catalog#10602-HNAE)
<b>Clone ID:</b>	MM0N1
<b>Ig Type:</b>	Mouse IgG1
<b>Applications:</b>	Neutralization
<b>Specificity:</b>	Human TNF-alpha / TNFA
<b>Formulation:</b>	0.2 µm filtered solution in PBS
<b>Storage:</b>	< -20°C

**Preparation**

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human TNF-alpha / TNFA (rh TNF-alpha / TNFA; Catalog#10602-HNAE; NP\_000585.2; Val77-Leu233). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.

**Specificity**

Human TNF-alpha / TNFA

**Storage**

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. **Preservative-Free.**

Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

**Background**

Tumor necrosis factor alpha (TNF-alpha), also known as TNF, TNFA or TNFSF2, is the prototypic cytokine of the TNF superfamily, and is a multifunctional molecule involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. Two receptors, TNF-R1 (TNF receptor type 1; CD120a; p55/60) and TNF-R2 (TNF receptor type 2; CD120b; p75/80), bind to TNF-alpha. TNF-alpha protein is produced mainly by macrophages, and large amounts of this cytokine are released in response to lipopolysaccharide, other bacterial products, and Interleukin-1 (IL-1). TNF-alpha is involved in fighting against the tumorigenesis, thus, is regarded as a molecular insight in cancer treatment.

**Reference**

Hector J, et al. (2007) TNF-alpha alters visfatin and adiponectin levels in human fat. *Horm Metab Res.* 39 (4): 250-5.

Berthold-Losleben M, et al. (2008) The TNF-alpha System: Functional Aspects in Depression, Narcolepsy and Psychopharmacology. *Curr Neuropharmacol.* 6 (3): 193-202.

# TNF-alpha / TNFA Neutralizing Antibody



Sino Biological  
Biological Solution Specialist

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## Applications

### Block

In a functional ELISA which immobilized recombinant Human TNFR1 (Catalog# 10872-H08H) at 1 $\mu$ g/mL (100  $\mu$ L/well) in the plate, the Mouse Anti-Human TNF $\alpha$  Monoclonal Antibody (Catalog# 10602-MM0N1) can block the binding of 0.2  $\mu$ g/mL of biotinylated Human TNF $\alpha$  (Catalog# 10602-HNAE-B) to human TNFR1, the EC<sub>50</sub> is 0.74  $\mu$ g/mL;

In a functional ELISA which immobilized recombinant Human TNFR2 (Catalog# 10417-H08H) at 2 $\mu$ g/mL (100  $\mu$ L/well) in the plate, the Mouse Anti-Human TNF $\alpha$  Monoclonal Antibody (Catalog# 10602-MM0N1) can block the binding of 0.2  $\mu$ g/mL of biotinylated Human TNF $\alpha$  (Catalog# 10602-HNAE-B) to human TNFR2, the EC<sub>50</sub> is 0.82  $\mu$ g/mL.

**Neutralization** – The neutralization activity of antibody is measured by its ability to neutralize TNF $\alpha$  induced cytotoxicity in the L-929 mouse fibroblast cell line. The Neutralization titer (IC<sub>50</sub>) is typically 30-120 ng/mL in the presence of 0.25 ng/mL Recombinant Human TNF $\alpha$  and 1  $\mu$ g/mL actinomycin D.

