

YR0013

Leader in Biomolecular Solutions for Life Science



# Human TNF alpha Monoclonal Antibody

Catalog No.: YR0013

## Basic Information

### Molecular Weight

150 kDa

### Endotoxin

<1EU/mg (<0.001EU/μg) Determined by LAL gel clotting assay

### Sterility

0.2 μm filtration

### Aggregation

<5% Determined by SECP

### Purity

94.03% Determined by SEC-HPLC

## Background

Adalimumab, the first fully human monoclonal antibody drug approved by FDA, binds to TNFα, inactivates TNF receptors, and downregulates the inflammatory reactions associated with a variety of autoimmune diseases, such as rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, ulcerative colitis, moderate to severe chronic psoriasis and juvenile idiopathic arthritis. Mainly produced by activated macrophages (M1), Tumor necrosis factor (TNF, cachexin, cachectin, tumor necrosis factor alpha, TNFα) plays important roles in the regulation of immune cells. As a member of a group of cytokines that stimulate the acute phase reaction, TNF is involved in systemic inflammation and able to induce fever, apoptotic cell death, cachexia, inflammation, and to inhibit tumorigenesis and viral replication and respond to sepsis via IL1 & IL6 producing cells. Dysregulation of TNF expression could have serious impact in a variety of human diseases including Alzheimer's disease, cancer, major depression and inflammatory bowel disease.

## Reported Applications

ELISA, neutralization, functional assays such as bioanalytical PK and ADA assays, and those assays for studying biological pathways

## Immunogen Information

### Clone

Adalimumab Biosimilar

### Isotype

Human IgG1 kappa

### Immunogen

Human TNF alpha

### Recommended Isotype Control(s)

In Vivo Grade Recombinant Human IgG1 Kappa Isotype Control Antibody

### Recommended Dilution Buffer

1×PBS pH 7.3

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Product Information

### Production

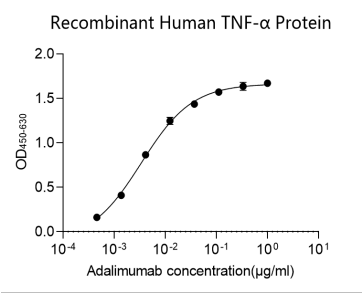
Purified from cell culture supernatant in an animal-free facility

### Purification

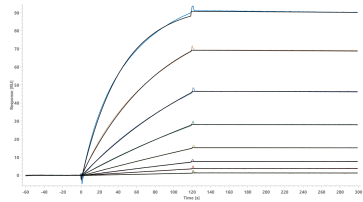
Protein A or G purification

### Storage

Store at 2 - 8°C. 2 - 8°C for up to 4 weeks and -80°C for long term storage (Avoid repeated freezing and thawing)



Direct ELISA binding curve demonstrating the recognition of Human Anti-Human TNF-α (Research Grade Adalimumab Biosimilar) Monoclonal Antibody to TNF-α. The target protein was coated onto the microplate well surface, followed by binding of the antibody. A donkey anti-human IgG HRP conjugate was used for detection.



Determined through SPR assay, the Human Anti-Human TNF-α (Research Grade Adalimumab Biosimilar) Monoclonal Antibody is Capable of binding to Human TNF-α with an affinity constant of 0.1658 M.