## **ANOGEN** - A Division of YES Biotech Laboratories Ltd.

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## Mouse Anti-Human TNF-α Monoclonal Antibody Datasheet

Product Name: mAb anti-Human TNF-α Clone No.: B1E4

Catalogue No.: MO-C40003E Quantity: 0.5 mg/vial

Mouse monoclonal antibody to human Tumor **Description:** 

Necrosis Factor alpha (TNF- $\alpha$ )

**Purification:** Protein G affinity purified

**Product Type** Primary antibody, detection antibody in

matched antibody pair.

**Target Protein:** Human TNF-α

Purified recombinant human TNF- $\alpha$ Immunogen:

**Fusion** Sp2/0-Ag14

Myeloma:

Specificity: This antibody recognizes human TNF-lpha in ELISA

and Western blot.

**Species** Human, other species not tested

Reactivity:

Host / Isotype: Mouse, IgG1 Kappa

Formulation: Lyophilized from a solution in 0.01M PBS, pH

Reconstitution: Double distilled water is recommended to

adjust the final concentration to 1.00mg/mL.

Storage: Store at -20°C

Research Cytokine, inflammation

Area:

Tumor Necrosis Factor-alpha (TNF- $\alpha$ ) is a **Background:** 

multifunctional pro-inflammatory cytokine, mainly secreted by activated macrophages. It is implicated with a variety of biological procedures including systemic inflammation, cell proliferation, apoptosis, lipid metabolism, and coagulation. The pleiotropic attribute of TNF- $\alpha$  regulation is associated with its ability to trigger multiple signalling pathways through its receptors, TNFR1 (p55) and TNFR2 (p75).

TNF- $\alpha$  not only contributes to the immune response to bacterial, fungal, viral and parasitic invasions, but also functions in tissue remodeling, autoimmune-diseases and the necrosis of specific tumors. TNF- $\alpha$  hyperexpression in response to some bacterial components such as LPS can cause life threatening septic shock. Recombinant TNF-α, in combination with chemotherapy, has been applied for treatment of soft sarcomas, melanomas and other irresectable tumors. Anti-TNF-α therapy has been used for treatment of rheumatoid arthritis.

**Applications:** 1. ELISA: When clone B1E4 is used as

> detection antibody and clone CH8820 (Cat. No.: MO-C40003B) is used as capture antibody in an ELISA assay that uses WHO reference material, the detection limit of the ELISA can reach

2.4pg/mL TNF-α.

## 2. Western Blot:

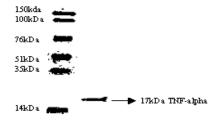


Figure: Western blot analysis of recombinant human TNF- $\alpha$  using anti-human TNF- $\alpha$  mAb

References: If research is published using this product,

please inform Anogen in order to cite the reference on this datasheet. Anogen will provide one unit of product in the same

category as gratitude.

This product is for LABORATORY RESEARCH USE and further manufacture ONLY, and cannot be administrated to human and animals for use in diagnostic and therapeutic procedures.

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