

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# TNF alpha monoclonal antibody

Catalog: MB65982 Host: Mouse Reactivity: Human, Mouse, Rat

#### **BackGround:**

TNF-α, the prototypical member of the TNF protein superfamily, is a homotrimeric type-II membrane protein (1,2). Membrane-bound TNF- $\alpha$  is cleaved by the metalloprotease TACE/ADAM17 to generate a soluble homotrimer (2). Both membrane and soluble forms of TNF-α are biologically active. TNF- $\alpha$  is produced by a variety of immune cells including T cells, B cells, NK cells, and macrophages (1). Cellular response to TNF-α is mediated through interaction with receptors TNF-R1 and TNF-R2 and results in activation of pathways that favor both cell survival and apoptosis depending on the cell type and biological context. Activation of kinase pathways (including JNK, Erk1/2, p38 MAPK, and NF-κB) promotes the survival of cells, while TNF-α-mediated activation of caspase-8 leads to programmed cell death (1,2). TNF-α plays a key regulatory role in inflammation and host defense against bacterial infection, notably Mycobacterium tuberculosis (3).

#### **Product:**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.

# **Molecular Weight:**

~ 17 kDa

## **Swiss-Prot:**

P01375

## **Purification&Purity:**

The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB (1/1000 - 1/2000), IHC (1/50 - 1/200)

#### Storage&Stability:

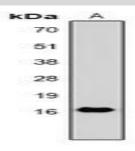
Store at  $4 \,\mathrm{C}$  short term. Aliquot and store at  $-20 \,\mathrm{C}$  long

term. Avoid freeze-thaw cycles.

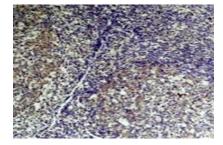
## **Specificity:**

Recognizes endogenous levels of TNF alpha protein.

## **DATA:**



Western blot analysis of TNF alpha expression in recombinant human TNF-a protein (A) whole cell lysates.



Immunohistochemical analysis of TNF alpha staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### Note:

For research use only, not for use in diagnostic procedure.

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