Product datasheet for AM50318PU-S

TNF alpha (TNF) Mouse Monoclonal Antibody [Clone ID: TNF706 + P/T2]

**Product data:**

Product Type: Primary Antibodies  
Clone Name: TNF706 + P/T2  
Applications: FC, IF, IHC  
Recommend Dilution:
- **Flow Cytometry:** 0.5-1 µg/million cells.  
- **Immunofluorescence:** 1-2 µg/ml.  
- **Immunohistochemistry on Formalin-Fixed Paraffin Sections:** 2-4 µg/ml for 30 minutes at RT.  
  Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.  
  **Positive Control:** HeLa, HL-60, or A431 cells. Macrophages in lymph node or Tonsil.  

Reactivity:
Canine, Feline, Human, Mouse, Rabbit, Rat, Zebrafish  
Host: Mouse  
Isotype: IgM  
Clonality: Monoclonal  
Immunogen: Recombinant Human TNF-alpha (TNF706); A hexadecapeptide corresponding to aa115-130 of Human TNF-alpha, conjugated to Thyroglobulin (P/T2).  
Specificity: Recognizes TNF-alpha.  
**Cellular Localization:** Cytoplasmic and extracellular (secreted).  

Formulation:
- 10mM PBS  
- State: Purified  
- State: Liquid purified IgG fraction from Bioreactor Concentrate  
  - Stabilizer: 0.05% BSA  
  - Preservative: 0.05% Sodium Azide  
Concentration: lot specific  
Purification: Protein A/G Chromatography  
Storage: Store undiluted at 2-8°C.  
Stability: Shelf life: one year from despatch.  
Predicted Protein Size: 17 kDa
Gene Name: tumor necrosis factor
Database Link: Entrez Gene 7124 Human

Background: Tumor Necrosis Factor Alpha (TNF alpha) is a protein secreted by lipopolysaccharide-stimulated macrophages, and causes tumor necrosis when injected into tumor bearing mice. TNF alpha is believed to mediate pathogenic shock and tissue injury associated with endotoxemia. TNF alpha exists as a multimer of two, three, or five non-covalently linked units, but shows a single 17kDa band following SDS PAGE under non-reducing conditions. TNF alpha is closely related to the 25kDa protein Tumor Necrosis Factor beta (lymphotoxin), sharing the same receptors and cellular actions. TNF alpha causes cytolysis of certain transformed cells, being synergistic with interferon gamma in its cytotoxicity. Although it has little effect on many cultured normal human cells, TNF alpha appears to be directly toxic to vascular endothelial cells. Other actions of TNF alpha include stimulating growth of human fibroblasts and other cell lines, activating polymorphonuclear neutrophils and osteoclasts, and induction of interleukin 1, prostaglandin E2 and collagenase production. TNF alpha is currently being evaluated in treatment of certain cancers and AIDS Related Complex.

Synonyms: TNF, TNF-a, TNFA, TNFSF2, Cachectin

Product images:

Formalin-fixed, paraffin-embedded human Erdheim Chester disease (also known as polyostotic sclerosing histiocytosis) stained with TNF alpha Monoclonal Antibody (TNF706 + P/T2).