

Product datasheet for **AM50176PU-T**

TNF alpha (TNF) Mouse Monoclonal Antibody [Clone ID: SPM543]

Product data:

| | |
|-----------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | SPM543 |
| Applications: | FC, IF, IHC, IP |
| Recommended Dilution: | ELISA: Use BSA free antibody for coating. Flow Cytometry: 0.5-1 µg/million cells in 0.1 ml. Immunofluorescence: 0.5-1 µg/ml. Immunoprecipitation: 1-2 µg/500 µg protein lysate. Immunohistochemistry on Frozen and Formalin-Fixed Sections: 2-4 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris buffer with 1mM EDTA, pH 9.0, 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: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | A hexadecapeptide corresponding to amino acids 115-130 of Human TNF-alpha, conjugated to Thyroglobulin. |
| 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 |
| Conjugation: | Unconjugated |
| Storage: | Store undiluted at 2-8°C. |



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Stability: Shelf life: one year from despatch.

Predicted Protein Size: 17 kDa

Gene Name: tumor necrosis factor

Database Link: [Entrez Gene 7124 Human P01375](#)

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