TNF-alpha (Tumor Necrosis Factor alpha) Antibody

Mouse Monoclonal Antibody [Clone SPM543]

Catalog No	Format	Size
7124-MSM1X-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7124-MSM1X-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7124-MSM1X-P1BX	Purified Ab WITHOUT BSA at 1.0mg/ml	100 ug

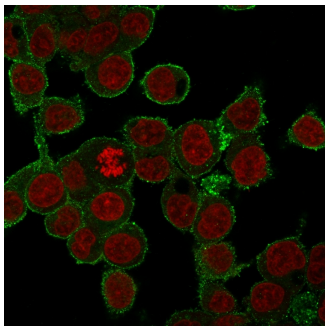
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

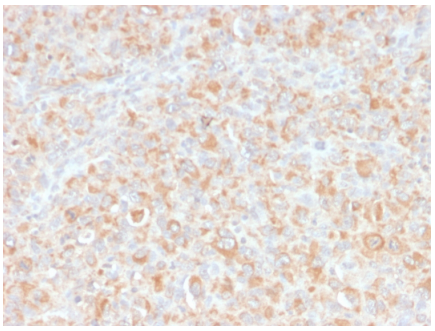
Clone	SPM543
Gene Name	TNF
Immunogen	A hexadecapeptide corresponding to aa115-130 of human TNF- , conjugated to thyroglobulin
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgM / Kappa
Mol. Weight of Antigen	17kDa
Cellular Localization	Cell membrane, Membrane, Secreted
Species Reactivity	Cat, Dog, Human, Mouse, Rabbit, Rat, Zebrafish
Positive Control	HeLa, HL-60 or A431 cells. Macrophages in lymph node or Tonsil.

**Optimal dilution for a specific application should be determined.*

Product Images for TNF-alpha (Tumor Necrosis Factor alpha) Antibody



Immunofluorescence staining of HepG2 cells using TNF alpha Mouse Monoclonal Antibody (SPM543) followed by goat anti-mouse IgG-CF488 (green). Counterstain is RedDot.



Formalin-fixed, paraffin-embedded human histiocytoma stained with TNF alpha Mouse Monoclonal Antibody (SPM543).

Specificity & Comments

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.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

AKT Signaling, Apoptosis, Autophagy, Cardiovascular, Colon Cancer, Cytokine Signaling, Developmental Biology, Hematopoietic Stem Cells, Immunology, MAPK Signaling, Neuroinflammation, Ovarian Cancer, Signal Transduction

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.