

Product datasheet for **PM1012A**

TNF alpha (TNF) Mouse Monoclonal Antibody

Product data:

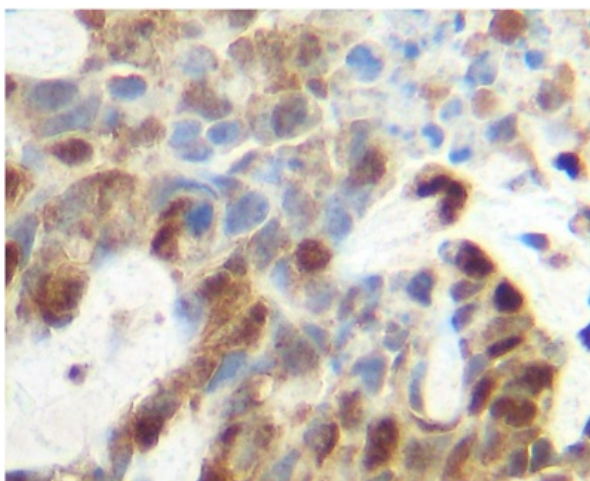
Product Type:	Primary Antibodies
Applications:	ELISA, FN, IHC, WB
Recommended Dilution:	Neutralization: To yield one-half maximal inhibition [ND50] of the biological activity of Human TNF-alpha (0.5 ng/ml), a concentration of < 0.1 µg/ml of this antibody is required. Sandwich ELISA: In a Sandwich ELISA (assuming 100 µl/well), a concentration of 2-4 µg/ml of this antibody will detect at least 1000 pg/ml of recombinant Human TNF-alpha when used with Biotin anti-Human TNF-alpha antibody (Cat.-No PP1071B) as the detection antibody at a concentration of approximately 0.5-1.0 µg/ml. Western Blot: To detect Human TNF-alpha, this antibody can be used at a concentration of 0.5-1.0 µg/ml. When used in conjunction with compatible secondary reagents the detection limit for recombinant Human TNF-alpha is 0.5-1.0 ng/lane, under reducing conditions and 0.25-0.50 ng/lane, under non-reducing conditions. Immunohistochemistry on Paraffin Sections: This antibody stained formalin-fixed, paraffin-embedded sections of human breast invasive ductal carcinoma. An HRP-labeled polymer detection system was used with DAB Chromogen. Heat induced antigen retrieval with a pH 6.0 sodium citrate buffer is recommended. Optimal concentrations and conditions may vary. A concentration of 15.0-20.0 µg/ml is recommended. <i>Tissue samples were provided by the Cooperative Human Tissue Network, which is funded by the National Cancer Institute.</i>
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	<i>E.coli</i> derived Recombinant Human TNF-alpha (Cat.-No PA132)
Specificity:	This antibody recognizes Human Tumor Necrosis Factor alpha (TNF alpha). Other species not tested.
Formulation:	PBS without preservatives State: Azide Free State: Lyophilized (sterile filtered) purified Ig fraction
Reconstitution Method:	Restore in sterile water to a concentration of 1.0 mg/ml.



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Purification:	Affinity Chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
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 tumour 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 noncovalently linked units, but shows a single 17 kDa band following SDS PAGE under non reducing conditions. TNF alpha is closely related to the 25 kDa protein Tumour Necrosis Factor beta (lymphotoxin), sharing the same receptors and cellular actions. TNF alpha causes cytolysis or cytostasis 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 sections of breast invasive ductal carcinoma stained with Monoclonal TNF-alpha Antibody Cat.-No PM1012A