

Product datasheet for **DM1049**

TNF alpha (TNF) Mouse Monoclonal Antibody [Clone ID: CH8820]

Product data:

Product Type:	Primary Antibodies
Clone Name:	CH8820
Applications:	ELISA, FN, IHC
Recommended Dilution:	ELISA: This antibody can be used as a Capture antibody in Sandwich ELISA applications for Human TNF-alpha detection in combination with a Biotin-conjugated monoclonal Tracer/Detection antibody Cat.-No AM09183BT-N. <i>Suggested Capture coating dose:</i> 1.0-2.0 µg/well (Substrate: TMB). For Biotin labeled Tracer antibody only: Avidin is labeled with HRP. If the above suggested conditions are followed approximately 4 pg/ml of TNF-alpha in serum/plasma or medium can be detected with an assay range of 0 to 2000 pg/ml. Neutralizing: This antibody neutralizes TNF-alpha activity <i>in vitro</i> . Use 2-5 ng of rTNF-alpha per µg of MAb. Immunohistochemistry on Paraffin Sections: Reacts with formalin-fixed paraffin-embedded tissues at a monoclonal antibody concentration of 10 µg/ml. Strong reaction with normal kidney, liver with cirrhosis, and normal lung samples, positive reaction with lung cancer samples.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant Human TNF-alpha
Specificity:	This monoclonal antibody recognizes both, recombinant and native TNF-alpha.
Formulation:	0.01M PBS, pH 7.0 State: Aff - Purified State: Lyophilized purified IgG fraction
Reconstitution Method:	Restore with double distilled water to adjust the final concentration to 1.0 mg/ml.
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated



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Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. 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