

## **Summary**

Production Name	TNF $\alpha$ (Q34)Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	WB,IHC,IF
Reactivity	Human, Rat, Mouse

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at $4^{\circ}$ C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	TNF TNFA TNFSF2	
Alternative Names	Tumor necrosis factor (Cachectin;TNF-alpha;Tumor necrosis factor ligand superfamily	
	member 2;TNF-a) [Cleaved into: Tumor necrosis factor, membrane form (N-terminal	
	fragment;NTF); Intracellular domain 1 (ICD1); Intracellular domain 2 (ICD2); C-domain 1;	
	C-domain 2; Tumor necrosis factor, soluble form]	
Gene ID	7124.0	
SwissProt ID	P01375.Synthetic Peptide of TNF $\alpha$	

# Application

Dilution Ratio	WB 1:1000-1:3000 IHC 1:50-1:200. IF 1:50-200
Molecular Weight	17,25kD

#### Background

This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Knockout studies in mice also suggested the neuroprotective function of this cytokine. [provided by RefSeq, Jul 2008], disease: Cachexia accompanies a variety of diseases, including cancer and infection, and is characterized by general ill health and malnutrition, disease: Genetic variations in TNF are associated with susceptibility to hepatitis B virus infection (HBV infection) [MIM:610424]. Approximately one third of all cases of cirrhosis and half of all cases of hepatocellular carcinoma can be attributed to chronic HBV infection. HBV infection may result in subclinical or asymptomatic infection, acute self-limited hepatitis, or fulminant hepatitis requiring liver transplantation, disease: Genetic variations in TNF are associated with susceptibility to psoriatic arthritis [MIM:607507]. Psoriasis is a chronic inflammatory dermatosis that affects approximately 2% of the population. It is characterized by red, scaly skin lesions that are usually found on the scalp, elbows, and knees, and may be associated with severe arthritis. Psoriatic arthritis has been defined as an inflammatory arthritis usually without any rheumatoid factor in serum (seronegative arthritis) associated with psoriasis.,function:Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation., online information: The Singapore human mutation and polymorphism database, online information: Tumor necrosis factor alpha entry,PTM:O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.,PTM:The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1.,PTM:The soluble form derives from the membrane form by proteolytic processing., similarity: Belongs to the tumor necrosis factor family., subunit: Homotrimer.,

## **Research Area**

#### MAPK\_ERK\_Growth;MAPK\_G\_Protein;Cytokine-cytokine receptor

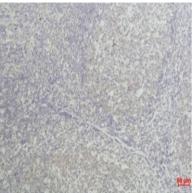
interaction; Apoptosis\_Inhibition; Apoptosis\_Mitochondrial; Apoptosis\_Overview; TGF-beta; Toll\_Like; NOD-like receptor; RIG-I-like receptor; Hematopoietic cell lineage; Natural killer cell mediated cytotoxicity; T\_Cell\_Receptor; Fc epsilon RI; Adipocytokine; Type II diabetes mellitus; Type I diabetes mellitus; Alzheimer's disease; Amyotrophic lateral sclerosis (ALS); Asthma; Systemic lupus erythematosus; Allograft rejection; Graft-versus-host disease; Hypertrophic cardiomyopathy (HCM); Dilated cardiomyopathy;

## Image Data

Product Name: TNF α(Q34)Mouse Monoclonal Antibody **Contract Catalog** #: AMM19084



Western blot analysis of Recombinant Human TNF a Protein with TNF  $\alpha$  Mouse mAb at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Human Tonsil Tissue using TNF aMouse mAb diluted at 1:50

#### Note

For research use only.