

## Immunotag™ TNF-α Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4689
Product Description	Immunotag™ TNF-α Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	TNFα
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	IHC-p,IF,ELISA
Recommended Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from TNF-α, at AA range: 110-190
Specificity	TNF-α Polyclonal Antibody detects endogenous levels of TNF-α protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	TNF
Accession No.	P01375 P06804 P16599
Alternate Names	TNF; TNFA; TNFSF2; Tumor necrosis factor; Cachectin; TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a

## Antibody Specification

Description	tumor necrosis factor(TNF) Homo sapiens 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/TNFR. 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],
Cell Pathway/ Category	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,
Protein Expression	Blood,Peripheral blood leukocyte,Placenta,Prostatic carcinoma,
Subcellular Localization	phagocytic cup,extracellular region,extracellular space,plasma membrane,integral component of plasma membrane,external side of plasma membrane,cell surface,membrane,integral component of membrane,membrane raft,recycling endosome,
Protein Function	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/TNFR. 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.,
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