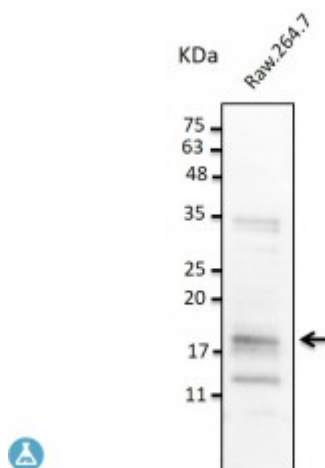


Anti-TNF alpha antibody



Description

Goat polyclonal antibody to TNF alpha. TNF-alpha is produced by a variety of immune cells including NK cells, B cells, T cells and macrophages. It is multifunctional proinflammatory cytokine that belongs to the tumour necrosis factor (TNF) superfamily. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. It is involved in the regulation of several processes including lipid metabolism cell differentiation and proliferation, coagulation and apoptosis. It has been implicated in a variety of diseases, including cancer and autoimmune diseases.

Model	STJ140123
Host	Goat
Reactivity	Avian, Bovine, Canine, Donkey, Feline, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Other, Porcine, Rabbit, Rat, Sheep, Simian
Applications	WB
Immunogen	Purified recombinant human TNF-alpha produced in E. coli.
Gene ID	7124
Gene Symbol	TNF
Dilution range	Western blot 1:500-1:2,000Immunofluorescence NDImmunohistochemistry (paraffin) NDImmunohistochemistry (frozen) ND
Specificity	Detects a band of approximately 17 kDa using Raw264.7 cell line by Western blot.
Purification	This antibody is epitope-affinity purified from goat antiserum.
Note	For research use only (RUO).

Protein Name	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]
Molecular Weight	26 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS, 20% glycerol and 0.05% sodium azide.
Concentration	4 mg/mL
Storage Instruction	Store at -20°, and avoid repeated freeze-thaw cycles.
Database Links	HGNC:11892 OMIM:191160
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]
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. Impairs regulatory T-cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Upregulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective . Key mediator of cell death in the anticancer action of BCG-stimulated neutrophils in combination with DIABLO/SMAC mimetic in the RT4v6 bladder cancer cell line . The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells.
Cellular Localization	Cell membrane Tumor necrosis factor, membrane form: Membrane. Single-pass type II membrane protein.. Tumor necrosis factor, soluble form: Secreted.. C-domain 1: Secreted.. C-domain 2: Secreted.
Post-translational Modifications	The soluble form derives from the membrane form by proteolytic processing. The membrane-bound form is further proteolytically processed by SPPL2A or SPPL2B through regulated intramembrane proteolysis producing TNF intracellular domains (ICD1 and ICD2) released in the cytosol and TNF C-domain 1 and C-domain 2 secreted into the extracellular space. 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. O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.