

# ARG21496 anti-TNF alpha antibody [MP6-XT22] (Biotin)

Package: 100 μg Store at: 4°C

### Summary

Product Description	Biotin-conjugated Rat Monoclonal antibody [MP6-XT22] recognizes TNF alpha
Tested Reactivity	Ms
Tested Application	ELISA, ELISPOT, FACS, ICC/IF, IHC-Fr, IHC-P, Neut, WB
Specificity	Mouse/Chicken TNF alpha.
Host	Rat
Clonality	Monoclonal
Clone	MP6-XT22
Isotype	IgG1, kappa
Target Name	TNF alpha
Species	Mouse
Immunogen	E. coli-expressed mouse TNF alpha.
Conjugation	Biotin
Alternate Names	Tumor necrosis factor ligand superfamily member 2; DIF; Cachectin; ICD2; ICD1; N-terminal fragment; TNF-a; TNFA; TNFSF2; TNF-alpha; Tumor necrosis factor; NTF

## **Application Instructions**

Application table	Application	Dilution
	ELISA	1:2000 - 1:4000
	ELISPOT	Assay-dependent
	FACS	Assay-dependent
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	Assay-dependent
	Neut	Assay-dependent
	WB	Assay-dependent

#### Application Note

\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Buffer	PBS and 0.1% Sodium azide.

Preservative	0.1% Sodium azide
Concentration	0.5 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Database links	GenelD: 21926 Mouse
	Swiss-port # P06804 Mouse
Gene Symbol	TNF
Gene Full Name	tumor necrosis factor
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]
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. 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. [UniProt]
Highlight	Related products: <u>TNF alpha antibodies;</u> <u>TNF alpha ELISA Kits;</u> <u>TNF alpha Duos / Panels;</u> <u>TNF alpha recombinant</u> <u>proteins;</u> <u>Anti-Rat IgG secondary antibodies;</u> Related news: <u>HMGB1 in inflammation</u> <u>Inflammatory Cytokines</u>
Calculated Mw	26 kDa
РТМ	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.