

### ARG56621 anti-TNF alpha antibody

Package: 50 μg Store at: -20°C

## Summary

Product Description	Rabbit Polyclonal antibody recognizes TNF alpha
Tested Reactivity	Ms
Tested Application	ELISA, IHC-Fr, Neut, WB
Host	Rabbit
Clonality	Polyclonal
lsotype	IgG
Target Name	TNF alpha
Species	Mouse
Immunogen	E.coli derived Recombinant Mouse TNF-α. (MLRSSSQNSS DKPVAHVVAN HQVEEQLEWL SQRANALLAN GMDLKDNQLV VPADGLYLVY SQVLFKGQGC PDYVLLTHTV SRFAISYQEK VNLLSAVKSP CPKDTPEGAE LKPWYEPIYL GGVFQLEKGD QLSAEVNLPK YLDFAESGQV YFGVIAL)
Conjugation	Un-conjugated
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	Sandwich: 0.5 - 2.0 µg/ml as a capture antibody
	IHC-Fr	1.0 μg/ml
	Neut	0.04 - 0.05 $\mu g/ml$ (To yield [ND50] of the biological activity of Murine TNF - $\alpha$ (0.5 ng/ml) )
	WB	0.1 - 0.2 μg/ml
Application Note	Sandwich ELISA (Capture antibody - Detection antibody): ARG56621 - ARG43399	
	* The dilutions indicate recom should be determined by the s	mended starting dilutions and the optimal dilutions or concentrations scientist.

# Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.2)
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

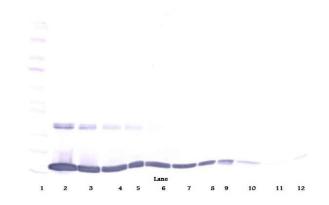
and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

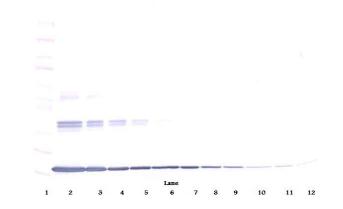
### **Bioinformation**

Database links	GeneID: 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-Rabbit 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.



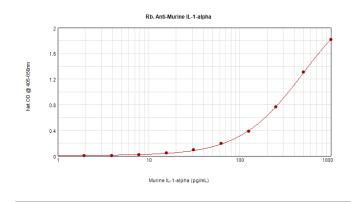
#### ARG56621 anti-TNF alpha antibody WB image

Western blot: 250 - 0.24 ng of Mouse TNF- $\alpha$  stained with ARG56621 anti-TNF alpha antibody, under reducing conditions.



#### ARG56621 anti-TNF alpha antibody WB image

Western blot: 250 - 0.24 ng of Mouse TNF- $\alpha$  stained with ARG56621 anti-TNF alpha antibody, under non-reducing conditions.



#### ARG56621 anti-TNF alpha antibody standard curve image

Sandwich ELISA: ARG56621 anti-TNF alpha antibody as a capture antibody at 0.5 - 2.0  $\mu$ g/ml combined with <u>ARG43399</u> anti-TNF alpha antibody (Biotin) as a detection antibody. Results of a typical standard run with optical density.