

## ARG56622 anti-TNF alpha antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes TNF alpha
Tested Reactivity	Hu, Ms
Tested Application	ELISA, IHC-P, Neut, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TNF alpha
Species	Human
Immunogen	E.coli derived Recombinant Human TNF-α. (VRSSSRTPSD KPAHVVANP QAEGQLQWLN RRANALLANG VELRDNQLVV PSEGLYLIYS QVLFKGQGCP STHVLLTHTI SRIAVSYQTK VNLLSAIKSP CQRETPEGAE AKPWYEPIYL GGVFQLEKGD RLSAEINRPD YLDFAESGQV YFGIILAL)
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-P	1 µg/ml - 10 µg/ml
	Neut	0.08 - 0.10 µg/ml (To yield [ND50] of the biological activity of Human TNF - α (0.5 ng/ml) )
	WB	0.1 - 0.2 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the 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

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Database links

[GeneID: 21926 Mouse](#)

[GeneID: 7124 Human](#)

[Swiss-port # P01375 Human](#)

[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/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]

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. [UniProt]

Highlight

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[TNF alpha antibodies](#); [TNF alpha ELISA Kits](#); [TNF alpha Duos / Panels](#); [TNF alpha recombinant proteins](#); [Anti-Rabbit IgG secondary antibodies](#);

Related news:

[HMGB1 in inflammation](#)

[Inflammatory Cytokines](#)

Calculated Mw

26 kDa

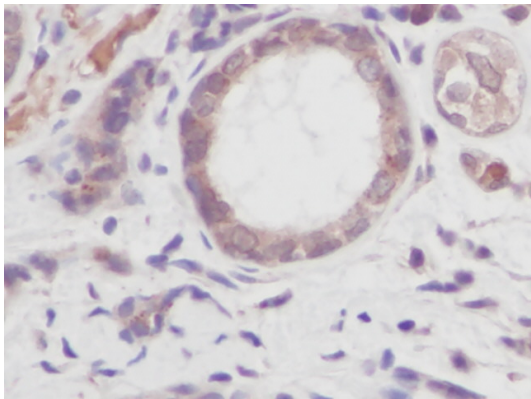
PTM

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.

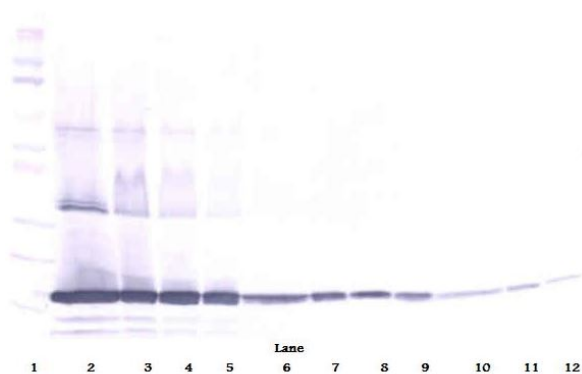
Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1.

O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.



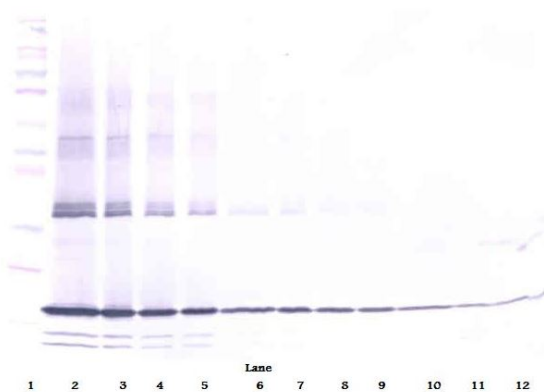
ARG56622 anti-TNF alpha antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded sections of Human breast invasive ductal carcinoma. The recommended ARG56622 anti-TNF alpha antibody concentration is 1 µg/ml-10 µg/ml with an overnight incubation at 4°C. An HRP-labeled polymer detection system was used with a DAB chromogen. Antigen Retrieval: Boil tissue section in Sodium Citrate buffer (pH 6.0) followed by cooling at RT for 20 min.



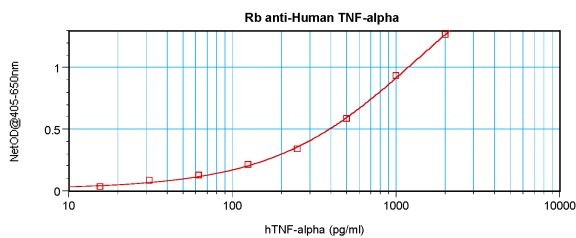
ARG56622 anti-TNF alpha antibody WB image

Western blot: 250 - 0.24 ng (left to right) of Human TNF alpha recombinant protein stained with ARG56622 anti-TNF alpha antibody at 0.1 - 0.2 µg/ml dilution, under reducing conditions.



ARG56622 anti-TNF alpha antibody WB image

Western blot: 250 - 0.24 ng (left to right) of Human TNF alpha recombinant protein stained with ARG56622 anti-TNF alpha antibody at 0.1 - 0.2 µg/ml dilution, under non-reducing conditions.



ARG56622 anti-TNF alpha antibody standard curve image

Sandwich ELISA: ARG56622 anti-TNF alpha antibody as a capture antibody at 0.5 - 2.0 µg/ml combined with anti-TNF alpha antibody (Biotin) as a detection antibody. Results of a typical standard run with optical density.