

ARG56624 anti-TNF alpha antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TNF alpha
Tested Reactivity	Rat, Zfsh
Tested Application	ELISA, IHC-Fr, Neut, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TNF alpha
Species	Rat
Immunogen	E.coli derived Recombinant Rat TNF-α. (MLRSSSQNSS DKPVAHVVAN HQAEEQLEWL SQRANALLAN GMDLKDNLV VPADGLYLIY SQVLFKGGGC PDYVLLTHTV SRFAISYQEK VSLLSAIKSP CPKDTPEGAE LKPWYEPMYL GGVFQLEKGD LLSAEVNLPK YLDITESGQV 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	0.07 - 0.10 µg/ml (To yield [ND50] of the biological activity of Rat TNF - α (2.0 ng/ml))
	WB	0.1 - 0.2 µg/ml
Application Note	Sandwich ELISA (Capture antibody - Detection antibody): ARG56624 - ARG43400 * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

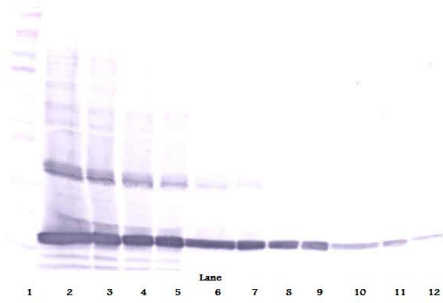
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.2)
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

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.

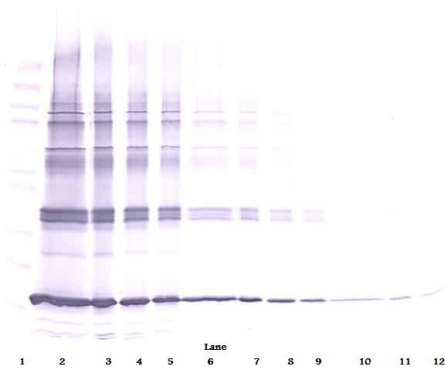
Bioinformation

Database links	GeneID: 24835 Rat Swiss-port # P16599 Rat
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	Related products: 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.



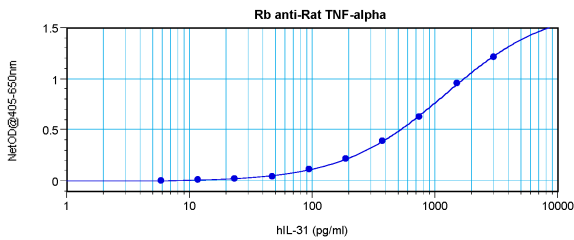
ARG56624 anti-TNF alpha antibody WB image

Western blot: 250 - 0.24 ng of Rat TNF- α stained with ARG56624 anti-TNF alpha antibody, under reducing conditions.



ARG56624 anti-TNF alpha antibody WB image

Western blot: 250 - 0.24 ng of Rat TNF- α stained with ARG56624 anti-TNF alpha antibody, under non-reducing conditions.



ARG56624 anti-TNF alpha antibody standard curve image

Sandwich ELISA: ARG56624 anti-TNF alpha antibody as a capture antibody at 0.5 - 2.0 $\mu\text{g}/\text{ml}$ combined with [ARG43400](#) anti-TNF alpha antibody (Biotin) as a detection antibody. Results of a typical standard run with optical density.