

ARG40571 anti-TNF alpha antibody (Biotin)

Package: 50 µg
Store at: 4°C

Summary

Product Description	Biotin-conjugated Rabbit Polyclonal antibody recognizes TNF alpha
Tested Reactivity	Hu
Tested Application	ELISA, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TNF alpha
Species	Human
Immunogen	Human 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	0.25 - 1 µg/ml
	IHC-P	Assay-dependent
	WB	0.1 - 0.2 µg/ml
Application Note	ELISA: ARG40571 (detection antibody) - ARG56622 (capture antibody) * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

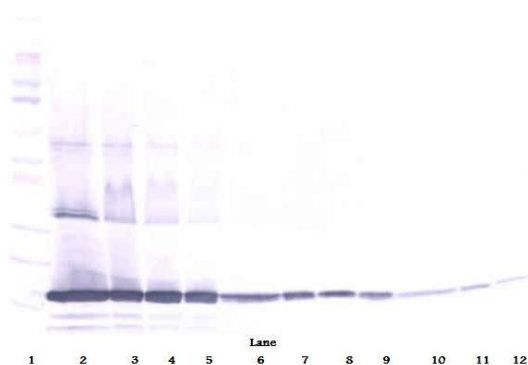
Form	Liquid
Purification	Affinity purified.
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TNF
-------------	-----

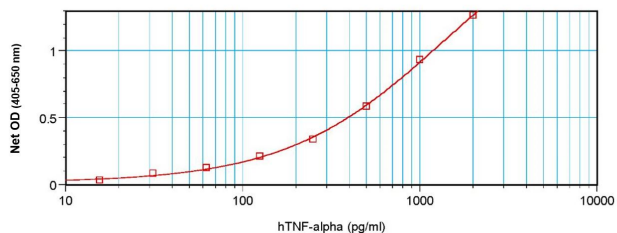
Gene Full Name	tumor necrosis factor
Background	This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. 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. [UniProt]
Cellular Localization	Cell membrane; Single-pass type II membrane protein. 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. [UniProt]

Images



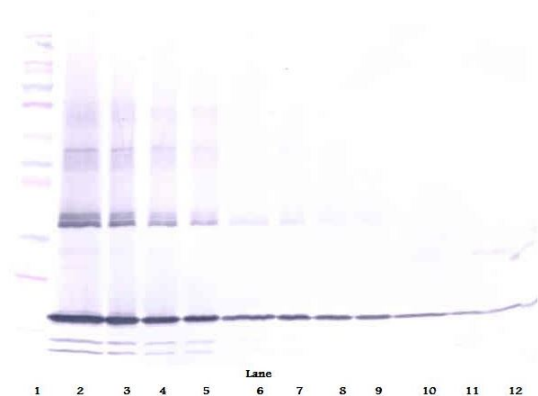
ARG40571 anti-TNF alpha antibody (Biotin) WB image

Western blot: 250 - 0.24 ng (left to right) of recombinant Human TNF alpha stained with ARG40571 anti-TNF alpha antibody (Biotin) at 0.1 - 0.2 µg/ml dilution, under reducing conditions.



ARG40571 anti-TNF alpha antibody (Biotin) ELISA image

ELISA: Human TNF alpha by sandwich ELISA (using 100 ul/well antibody solution), a concentration of 0.25 - 1.0 µg/ml of ARG40571 anti-TNF alpha antibody (Biotin) (detection antibody) in conjunction with ARG56622 anti-TNF alpha antibody (capture antibody), allows the detection of at least 0.2 - 0.4 ng/well of recombinant Human TNF alpha.



ARG40571 anti-TNF alpha antibody (Biotin) WB image

Western blot: 250 - 0.24 ng (left to right) of recombinant Human TNF alpha stained with ARG40571 anti-TNF alpha antibody (Biotin) at 0.1 - 0.2 µg/ml dilution, under non-reducing conditions.