

ARG10001 anti-TNF alpha antibody [CH8820]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [CH8820] recognizes TNF alpha
Tested Reactivity	Hu
Tested Application	ELISA, IHC-P, Neut
Host	Mouse
Clonality	Monoclonal
Clone	CH8820
Isotype	IgG1, kappa
Target Name	TNF alpha
Species	Human
Species	???
Immunogen	Purified recombinant human TNF alpha.
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	Assay-dependent
	IHC-P	10 µg/ml
	Neut	1 µg antibody for 2-5 ng of recombinant TNF-alpha
Application Note	ELISA: This antibody can be used as a capture antibody in sandwich ELISA in combination with a tracer/detection antibody (Cat. ARG10194 anti-TNF alpha antibody [B1E4] (HRP)). Neutralizing: This antibody can neutralize TNF-alpha activity in vitro. Suggest use 2-5 ng of recombinant TNF-alpha per µg of mAb. IHC: The antibody can react with formalin-fixed paraffin-embedded tissues. It showed strong reaction with normal kidney, liver with cirrhosis, and normal lung samples, and positive reaction with lung cancer samples at 10µg/mL antibody concentration. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	IHC-P: normal kidney, liver with cirrhosis, and normal lung samples	

Properties

Form	Liquid
Purification	Protein G affinity purified

Buffer	0.01M PBS (pH 7.0)
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: 7124 Human Swiss-port # P01375 Human
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 (PubMed:23396208). The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells. [UniProt]
Highlight	<p>Related Antibody Duos and Panels: ARG30069 TNF alpha ELISA Antibody Duo</p> <p>Related products: TNF alpha antibodies; TNF alpha ELISA Kits; TNF alpha Duos / Panels; TNF alpha recombinant proteins; Anti-Mouse IgG secondary antibodies;</p> <p>Related news: HMGB1 in inflammation Inflammatory Cytokines</p>
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Immune System antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	26 kDa
PTM	<p>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.</p> <p>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.</p> <p>O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.</p>