

## ARG10158 anti-TNF alpha antibody [2C8]

Package: 100 µg, 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [2C8] recognizes TNF alpha
Tested Reactivity	Hu, Ms
Tested Application	ELISA, FACS, ICC/IF, IHC-Fr, IHC-P, Neut, WB
Host	Mouse
Clonality	Monoclonal
Clone	2C8
Isotype	IgG1
Target Name	TNF alpha
Species	Human
Immunogen	Human recombinant tumor necrosis factor of alpha type
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. (capture - detection): 2C8 - F6C5.
	FACS	1µg for 10 <sup>6</sup> cells
	ICC/IF	10-20 µg/ml
	IHC-Fr	10-20 µg/ml
	IHC-P	10-20 µg/ml
	Neut	Assay-dependent
	WB	Assay-dependent

**Application Note**

Neutralizing: The clone [2C8] inhibit biological activity of TNF-alpha. The antibody concentration is depending on the test design from 10 ng/ml to 5 µg/ml.

ELISA: The clone 2C8 can be used as a capture antibody in sandwich ELISA in combination with a tracer/detection antibody clone [F6C5] (Cat. No.: [ARG10441](#)).

IHC-P: Antigen Retrieval: Boil tissue section in EDTA pH8.0 or pH9.0.

\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

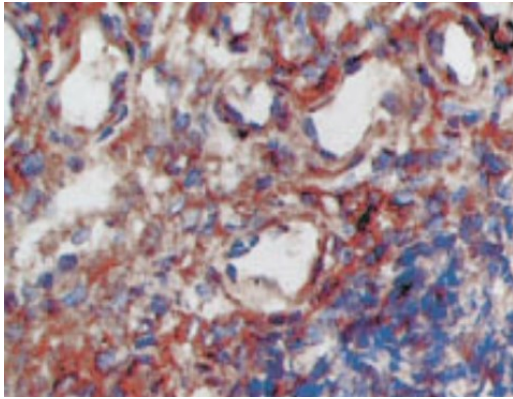
### Properties

Form	Liquid
------	--------

Purification	Protein A affinity purified.
Buffer	PBS (pH 7.4) and 0.09% Sodium azide
Preservative	0.09% Sodium azide
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	<a href="#">GeneID: 21926 Mouse</a> <a href="#">GeneID: 7124 Human</a> <a href="#">Swiss-port # P01375 Human</a> <a href="#">Swiss-port # P06804 Mouse</a>
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 products:</p> <p><a href="#">TNF alpha antibodies</a>; <a href="#">TNF alpha ELISA Kits</a>; <a href="#">TNF alpha Duos / Panels</a>; <a href="#">TNF alpha recombinant proteins</a>; <a href="#">Anti-Mouse IgG secondary antibodies</a>;</p> <p>Related news:</p> <p><a href="#">HMGB1 in inflammation</a>  <a href="#">Inflammatory Cytokines</a></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>



ARG10158 anti-TNF alpha antibody [2C8] IHC-Fr image

Immunohistochemistry: Frozen section of human joint from a patient with rheumatoid arthritis stained with ARG10158 anti-TNF alpha antibody [2C8].