

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 ⁶ 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.

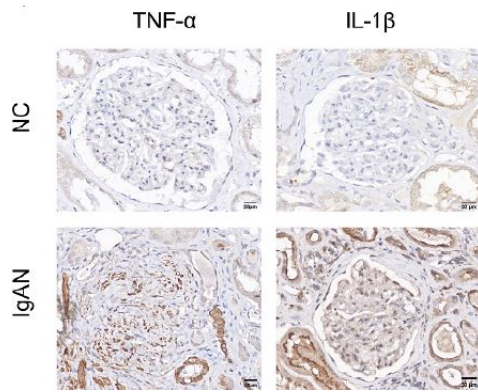
Properties

| | |
|------|--------|
| 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

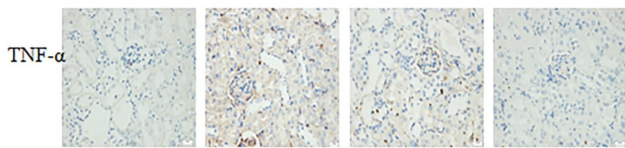
| | |
|----------------|--|
| Database links | GeneID: 21926 Mouse GeneID: 7124 Human Swiss-port # P01375 Human Swiss-port # P06804 Mouse |
| Gene Symbol | TNF |
| Gene Full Name | tumor necrosis factor |
| Background | This gene encodes a multifunctional proinflammatory cytokine that belongs to the 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 (PubMed:23396208). The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells. [UniProt] |
| Highlight | <p>Related products:</p> <p>TNF alpha antibodies; TNF alpha ELISA Kits; TNF alpha Duos / Panels; TNF alpha recombinant proteins; Anti-Mouse IgG secondary antibodies;</p> <p>Related news:</p> <p>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> |



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

Immunohistochemistry: Human renal stained with ARG10158 anti-TNF alpha antibody [2C8] and [ARG66285 anti-IL1 beta antibody \[SQab1748\]](#) .

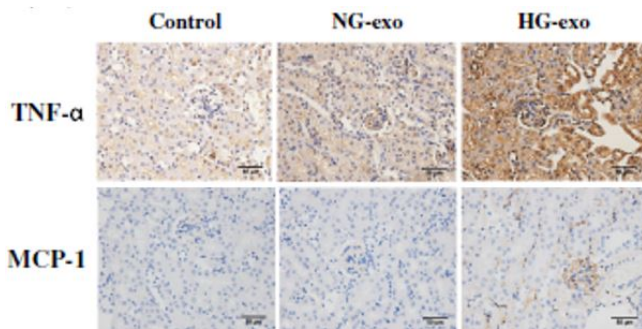
From Tan YY et al. Ren Fail (2025), [doi: 10.1080/0886022X.2025.2508297](#), Fig. 6A.



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

Immunohistochemistry: Mouse Renal tissue stained with ARG10158 anti-TNF alpha antibody [2C8].

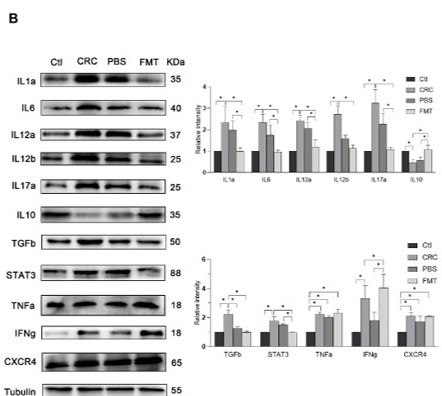
From Hanxu Zeng et al. Inflamm Res. (2020), [doi: 10.1007/s00011-020-01411-4](#), Fig. 10a.



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

Immunohistochemistry: Mouse kidney stained with [ARG56590 anti-CCL2 / MCP1 antibody \[2.2-4H5-1A11\]](#) and ARG10158 anti-TNF alpha antibody [2C8].

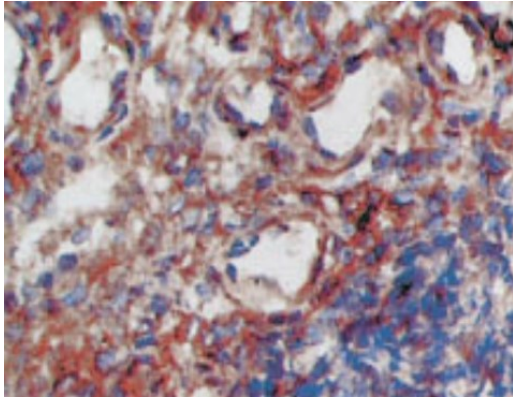
From Zhao J et al. FASEB J. (2022), [doi: 10.1096/fj.202200550RR](#), Fig. 5. D.



ARG10158 anti-TNF alpha antibody [2C8] WB image

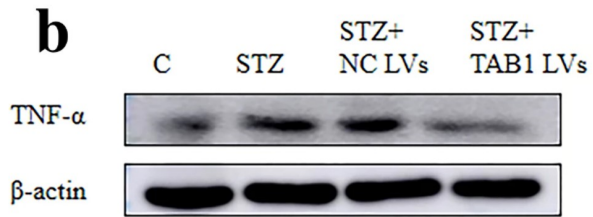
Western blot: Mouse intestine stained with [ARG21502 anti-IFN gamma antibody \[XMG1.2\]](#), [ARG56667 anti-IL1 alpha antibody](#), [ARG56625 anti-IL6 antibody](#), [ARG55256 anti-IL17 / IL17A antibody](#), ARG10158 anti-TNF alpha antibody [2C8], [ARG21475 anti-IL10 antibody \[JES5-2A5\]](#), [ARG10002 anti-TGF beta antibody \[TB21\]](#), [ARG54674 anti-CXCR4 antibody](#) and [ARG54150 anti-STAT3 antibody](#).

From Yu H et al. Front Microbiol. (2023), [doi: 10.3389/fmicb.2023.1126808](#), Fig. 4. B.



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].



ARG10158 anti-TNF alpha antibody [2C8] WB image

Western blot: Mouse Renal tissue stained with ARG10158 anti-TNF alpha antibody [2C8].

From Hanxu Zeng et al. *Inflamm Res.* (2020), [doi: 10.1007/s00011-020-01411-4](https://doi.org/10.1007/s00011-020-01411-4), Fig. 10a.