

ARG65481 anti-TNF alpha antibody [MAb1] (azide free)

Package: 100 µg
Store at: -20°C

Summary

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| Product Description | Azide free Mouse Monoclonal antibody [MAb1] recognizes TNF-alpha |
| Tested Reactivity | Hu |
| Tested Application | ELISA, Neut, WB |
| Specificity | The clone MAb1 recognizes human 17-26 kDa cytokine TNF-alpha (tumor necrosis factor alpha). |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | MAb1 |
| Isotype | IgG1 |
| Target Name | TNF alpha |
| Species | Human |
| Immunogen | 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 |
| | Neut | Assay-dependent |
| | WB | Assay-dependent |
| Application Note | Sandwich ELISA (Capture antibody - Detection antibody): ARG65481 - ARG65482 (in Biotinylated form) Functional application: Neutralization. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |

Properties

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| Form | Liquid |
| Purification | Purification with Protein A. |
| Purification Note | 0.2 µm filter sterilized. |
| Purity | > 95% (by SDS-PAGE) |
| Buffer | PBS (pH 7.4) |
| Concentration | 1 mg/ml |

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| 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

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| Database links | GeneID: 7124 Human Swiss-port # P01375 Human |
| Gene Symbol | TNF |
| Gene Full Name | tumor necrosis factor |
| Background | TNF-alpha is a cytokine produced by monocytes, macrophages, neutrophils, NK cells, CD4+ T cells and many transformed cells. It can be expressed as a 17 kDa free molecule, or as a 26 kDa membrane protein. TNF-alpha easily forms stable trimers, but also other multimeric complexes. In the immune system, it is an important regulator, which has cytolytic and cytostatic activity against a range of tumor cells, increases fibroblast proliferation and supports neutrophil chemotaxis and phagocytosis. |
| 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</p> <p>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> |