

ARG23004 anti-TNF alpha antibody [CC327]

Package: 250 µg

Store at: -20°C

Summary

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| Product Description | Mouse Monoclonal antibody [CC327] recognizes TNF alpha Mouse anti Bovine TNF alpha antibody, clone CC327 recognizes bovine TNF alpha, a 17.5 kDa cytokine, expressed by many different stimulated cell types including monocytes, macrophages, endothelial cells, fibroblasts and both T and B-lymphocytes. The production of TNF alpha is induced by a variety of factors, dependant upon cell type and includes bacterial toxins, IL-1, PDGF, IFN-beta, NGF, Oncostatin M and viral infections. The presence of TNF alpha is responsible for diverse immunomodulatory, anti-tumour and toxic effects and under certain conditions is also capable of self-stimulation and inhibition. |
| Tested Reactivity | Bov, Deer |
| Tested Application | ELISA, FACS |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | CC327 |
| Isotype | IgG2b |
| Target Name | TNF alpha |
| Species | Bovine |
| Immunogen | Recombinant Bovine 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 |
| | FACS | Assay-dependent |
| Application Note | FACS: Membrane permeabilisation is required for this application. Use 10 µl of the suggested working dilution to label 10 ⁶ cells in 100 µl. ELISA: This reagent may be used as a capture antibody in a sandwich ELISA for bovine TNF alpha in combination with a detection reagent. * 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 G. |
| Buffer | PBS and 0.09% Sodium azide |

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| 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

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| 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-Mouse 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. |