



# Rabbit Anti-Human TNF-α Chimeric Monoclonal Antibody, clone cA2 (DMABB-JX210)

This product is for research use only and is not intended for diagnostic use.

# PRODUCT INFORMATION

| Product Overview   | This antibody was produced recombinantly from the original cA2 antibody sequence and can be used for ELISA and flow cytometry (FC) applications, as well as in vivo. The cA2 antibody was generated by immunization of mice with recombinant human TNF, followed by fusion of the mouse spleen cells with an SP2/0 hybridoma and subcloning. |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Specificity        | Cross Reactivity (+) TNF-α, soluble TNF-α                                                                                                                                                                                                                                                                                                    |
|                    | (+) TNF-β                                                                                                                                                                                                                                                                                                                                    |
| Immunogen          | Recombinant human TNF                                                                                                                                                                                                                                                                                                                        |
| Isotype            | lgG, κ                                                                                                                                                                                                                                                                                                                                       |
| Source/Host        | Rabbit                                                                                                                                                                                                                                                                                                                                       |
| Species Reactivity | Human                                                                                                                                                                                                                                                                                                                                        |
| Clone              | cA2                                                                                                                                                                                                                                                                                                                                          |
| Purification       | Protein A Purified                                                                                                                                                                                                                                                                                                                           |
| Conjugate          | Unconjugated                                                                                                                                                                                                                                                                                                                                 |
| Applications       | ELISA, FC, in vivo  Each laboratory should determine an optimum working titer for use in its particular application.  Other applications have not been tested but use in such assays should not necessarily be excluded.                                                                                                                     |

45-1 Ramsey Road, Shirley, NY 11967, USA

Tel: 1-631-624-4882 Fax: 1-631-938-8221

| Format        | Purified, Liquid                           |
|---------------|--------------------------------------------|
| Concentration | Lot specific                               |
| Size          | 200 μg                                     |
| Buffer        | PBS with 0.02% ProClin300                  |
| Storage       | Store at -20 °C. Avoid freeze/thaw cycles. |
| Ship          | Wet ice                                    |

# **BACKGROUND**

### Introduction

TNF alpha is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophage and bind to its receptors, TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. TNF alpha is involved in the regulation of immune cells, cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. TNF alpha exists as a multimer of two, three, or five noncovalently linked units, but shows a single 17 kDa band following SDS-PAGE under non-reducing conditions. Knockout studies in mice also suggested the neuroprotective function of TNF alpha, and has been observed to causes tumor necrosis when injected into tumor-bearing mice. Other functions of TNF-alpha include its role in the immune response to bacterial, viral, parasitic and certain fungal infections, as well as its role in the necrosis of specific tumors. TNF alpha causes cytolysis or cytostasis of certain transformed cells, being synergistic with interferon-gamma in its cytotoxicity. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer.

## Keywords

TNF;DIF;TNFA;TNFSF2;TNF-alpha;TNLG1F;Tumor necrosis factor

# **GENE INFORMATION**

| Official Symbol | tumor necrosis factor                                                                                                                                                                                                                           |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Synonyms        | TNF; tumor necrosis factor; DIF; TNFA; TNFSF2; TNF-alpha; tumor necrosis factor; APC1 protein; TNF, macrophage-derived; TNF, monocyte-derived; TNF-a; cachectin; tumor necrosis factor ligand superfamily member 2; tumor necrosis factor-alpha |
| UniProt ID      | <u>P01375</u>                                                                                                                                                                                                                                   |