

DESCRIPTION

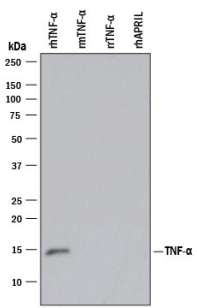
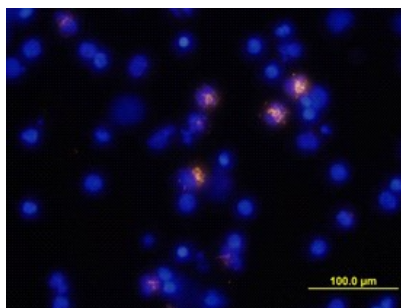
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| Species Reactivity | Human |
| Specificity | Detects human TNF- α in ELISAs and Western blots. In sandwich ELISAs, less than 0.05% cross-reactivity with recombinant human TNF- β , recombinant mouse TNF- α , recombinant rat TNF- α , and recombinant porcine TNF- α is observed. |
| Source | Monoclonal Mouse IgG ₁ Clone # 28401 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant human TNF- α Gly57-Leu233 (predicted) Accession # P01375 |
| Endotoxin Level | <0.10 EU per 1 μ g of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS. |

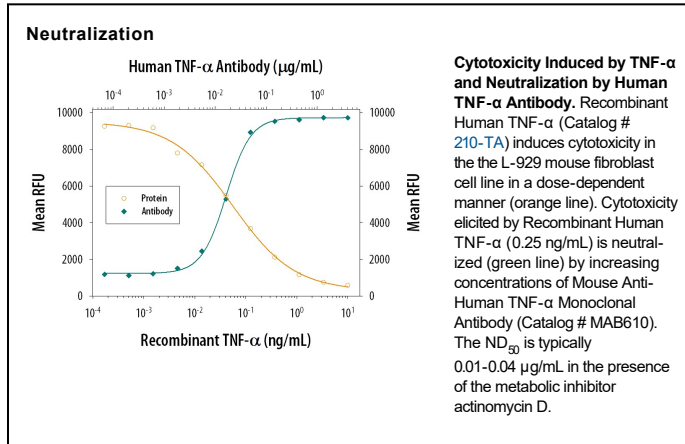
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---|--|--|
| Western Blot | 1 μ g/mL | See Below |
| Immunocytochemistry | 8-25 μ g/mL | See Below |
| Human TNF-α Sandwich Immunoassay | | Reagent |
| ELISA Capture | 2-8 μ g/mL | Human TNF- α Antibody (Catalog # MAB610) |
| ELISA Detection | 0.1-0.4 μ g/mL | Human TNF- α Biotinylated Antibody (Catalog # BAF210) |
| Standard | | Recombinant Human TNF- α (Catalog # 210-TA) |
| Neutralization | Measured by its ability to neutralize TNF- α -induced cytotoxicity in the L-929 mouse fibroblast cell line. Matthews, N. and M.L. Neale (1987) in <i>Lymphokines and Interferons, A Practical Approach</i> . Clemens, M.J. <i>et al.</i> (eds): IRL Press. 221. The Neutralization Dose (ND ₅₀) is typically 0.01-0.04 μ g/mL in the presence of actinomycin D and 0.25 ng/mL Recombinant Human TNF- α . | |

DATA

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| <p>Western Blot</p>  <p>Detection of Recombinant Human TNF-α by Western Blot. Western blot shows 25 ng of Recombinant Human TNF-α (Catalog # 210-TA), Recombinant Mouse TNF-α aa 80-235 (Catalog # 410-MT), Recombinant Rat TNF-α (Catalog # 510-RT), and Recombinant Human APRIL/TNFSF13 (Catalog # 5860-AP). PVDF Membrane was probed with 1 μg/mL of Mouse Anti-Human TNF-α Monoclonal Antibody (Catalog # MAB610) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for TNF-α at approximately 15 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 3</i>.</p> | <p>Immunocytochemistry</p>  <p>TNF-α in Human PBMCs. TNF-α was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) stimulated with LPS and monensin using Mouse Anti-Human TNF-α Monoclonal Antibody (Catalog # MAB610) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for <i>Fluorescent ICC Staining of Non-adherent Cells</i>.</p> |
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PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

TNF- α , designated TNFSF2, is a trimeric glycoprotein active in both membrane bound and secreted forms. TNF- α is produced by several lymphoid cells as well as by astrocytes, endothelial cells, and smooth muscle cells. TNF- α binds to TNF RI and TNF RII present on virtually all cell types where it triggers the activation of multiple signal transduction pathways and modulates the expression of a wide variety of genes.