

DESCRIPTION

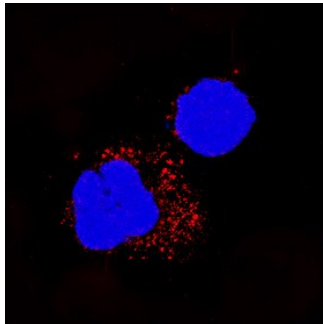
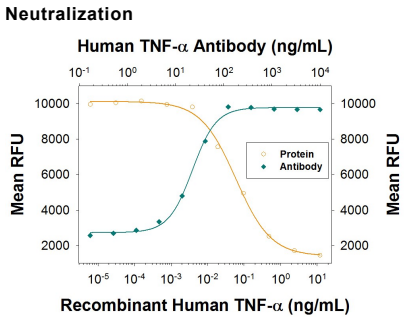
Species Reactivity	Human
Specificity	Detects human TNF- α in direct ELISAs and Western blots. In direct ELISAs, approximately 25-50% cross-reactivity with recombinant porcine TNF- α and recombinant rhesus macaque TNF- α is observed but no cross-reactivity with recombinant cotton rat TNF- α , recombinant rat TNF- α , recombinant human (rh) LT α 1/ β 2, rhLT α 2/ β 1, rhAPRIL, rhBAFF, rhEDA-A2, recombinant mouse EDA, rhFas Ligand, rhLIGHT, rhOX40 Ligand, rhTRAIL, rhTRANCE, rhTWEAK, or rhVEGI is observed.
Source	Recombinant Monoclonal Mouse IgG ₁ Clone # 6401R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TNF- α Gly57-Leu233 Accession # P01375
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Supplied as a solution in PBS. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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
Immunocytochemistry	3-25 μ g/mL	See Below
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 0.01-0.06 μ g/mL in the presence of 0.75 ng/mL Recombinant Human TNF- α and 0.5 μ g/mL actinomycin D	

DATA

<p>Immunocytochemistry</p>  <p>TNF-α in Human PBMCs. TNF-α was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Recombinant Mouse Anti-Human TNF-α Monoclonal Antibody (Catalog # MAB2101R) at 3 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>	<p>Neutralization</p>  <p>Cytotoxicity Induced by TNF-α and Neutralization by Human TNF-α Antibody. Recombinant Human TNF-α (Catalog # 210-TA) induces cytotoxicity in the L-929 mouse fibroblast cell line in a dose-dependent manner (orange line). Cytotoxicity elicited by Recombinant Human TNF-α (0.75 ng/mL) is neutralized (green line) by increasing concentrations of Recombinant Human TNF-α Monoclonal Antibody (Catalog # MAB2101R). The ND₅₀ is typically 0.01-0.06 μg/mL in the presence of the metabolic inhibitor actinomycin D (0.5 μg/mL).</p>
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PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. 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. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C, as supplied. • 1 month, 2 to 8 °C under sterile conditions after opening. • 6 months, -20 to -70 °C under sterile conditions after opening.

BACKGROUND

TNF- α 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.