

TNF α (J1D9): sc-33639

BACKGROUND

Tumor necrosis factor β (TNF β), also known as lymphotoxin, is a pleiotropic cytokine. TNF α , also known as cachectin, is a smaller cytokine that binds to the same receptors producing a vast array of effects similar to those of TNF β . TNF β and TNF α share 30% amino acid homology and have similar biological activities. TNF β is produced by activated lymphocytes, including CD4⁺ T helper cell type 1 lymphocytes, CD8⁺ lymphocytes and certain B lymphoblastoid cell lines. TNF α is produced by several different cell types, which include lymphocytes, neutrophils and macrophages. TNF α and TNF β can modulate many immune and inflammatory functions, while having the ability to inhibit tumor growth. Target tumor cells must express TNF receptors 1 and 2 to be killed, with the p55 receptor mediating the cytotoxic response.

CHROMOSOMAL LOCATION

Genetic locus: TNF (human) mapping to 6p21.33; Tnf (mouse) mapping to 17 B1.

SOURCE

TNF α (J1D9) is a mouse monoclonal antibody raised against purified recombinant human TNF α .

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for neutralization, sc-33639 L, 200 μ g/0.1 ml.

TNF α (J1D9) is available conjugated to agarose (sc-33639 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-33639 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-33639 PE), fluorescein (sc-33639 FITC), Alexa Fluor® 488 (sc-33639 AF488), Alexa Fluor® 546 (sc-33639 AF546), Alexa Fluor® 594 (sc-33639 AF594) or Alexa Fluor® 647 (sc-33639 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-33639 AF680) or Alexa Fluor® 790 (sc-33639 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TNF α (J1D9) is recommended for detection of TNF α of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for TNF α siRNA (h): sc-37216, TNF α siRNA (m): sc-37217, TNF α shRNA Plasmid (h): sc-37216-SH, TNF α shRNA Plasmid (m): sc-37217-SH, TNF α shRNA (h) Lentiviral Particles: sc-37216-V and TNF α shRNA (m) Lentiviral Particles: sc-37217-V.

Molecular Weight of transmembrane TNF α : 26 kDa.

Molecular Weight of soluble TNF α : 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

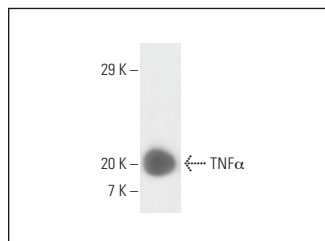
RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



TNF α (J1D9): sc-33639. Western blot analysis of human recombinant TNF α .

SELECT PRODUCT CITATIONS

- Hepgül, G., et al. 2010. Preventive effect of pentoxifylline on acute radiation damage via antioxidant and anti-inflammatory pathways. Dig. Dis. Sci. 55: 617-625.
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- Santos, L.C.D.S., et al. 2021. Immunohistochemical and histophysiological study of prolonged use of nandrolone on reproductive organs and fertility. Biotech. Histochem. 96: 468-486.
- Yang, W., et al. 2022. Delicate regulation of IL-1 β -mediated inflammation by cyclophilin A. Cell Rep. 38: 110513.
- Castrejón-Téllez, V., et al. 2022. High sucrose ingestion during a critical period of vessel development promotes the synthetic phenotype of vascular smooth muscle cells and modifies vascular contractility leading to hypertension in adult rats. Int. J. Hypertens. 2022: 2298329.
- Hinman, S.S., et al. 2022. Suspended collagen hydrogels to replicate human colonic epithelial cell interactions with immune cells. Adv. Biol. 6: e2200129.
- Lee, H.L., et al. 2022. Anti-amnesic effect of synbiotic supplementation containing *Corni fructus* and *Limosilactobacillus reuteri* in DSS-induced colitis mice. Int. J. Mol. Sci. 24: 90.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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