**BACKGROUND**

Tumor necrosis factor β (TNFβ), also known as lymphotoxin, is a pleiotropic cytokine that has a molecular weight of 25 kDa. TNFα, also known as cachectin, is a smaller cytokine with a molecular weight of 26 kDa (transmembrane) and 17 kDa (soluble) that binds to the same receptors producing a vast array of effects similar to those of TNFβ. TNFβ and TNFα share 30% amino acid homology and have similar biological activities. TNFβ is produced by activated lymphocytes, including CD4+ T helper cell type 1 lymphocytes, CD8+ lymphocytes and certain B lymphoblastoid cell lines. TNFα is produced by several different cell types, which include lymphocytes, neutrophils and macrophages. TNFα and TNFβ can modulate many immune and inflammatory functions, while having the ability to inhibit tumor growth. Target tumor cells must express TNF receptors 1 (55 kDa) and 2 (75 kDa) to be killed, with the p55 receptor mediating the cytotoxic response.

**REFERENCES**


**APPLICATIONS**

TNFα (MP6-XT22) is recommended for detection of TNFα of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for TNFα siRNA (m): sc-37217.

Molecular Weight of transmembrane TNFα: 26 kDa.

Molecular Weight of soluble TNFα: 17 kDa.

**CHROMOSOMAL LOCATION**

Genetic locus: TNF (human) mapping to 6p21.3; Tnf (mouse) mapping to 17 B1.

**SOURCE**

TNFα (MP6-XT22) is a rat monoclonal antibody raised against recombinant TNFα of mouse origin.

**PRODUCT**

Each vial contains 100 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

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