**BACKGROUND**

Tumor necrosis factor α (TNFα), also known as lymphotoxin, is a pleiotropic cytokine. TNFα, also known as cachectin, is a smaller cytokine 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 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**

TNFα (L-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TNFα of mouse origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-1351 P,(100 µg).

**APPLICATIONS**

TNFα (L-19) is recommended for detection of TNFα of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:200, dilution range 1:50-1:500) and/or Insulin treatments on streptozotocin induced diabetic (type I diabetes) rat aorta and cavernous tissues. Eur. J. Pharmacol. 660: 476-484.

**STORAGE**

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

**SELECT PRODUCT CITATIONS**


