**BACKGROUND**

Tumor necrosis factor b (TNFβ), also known as lymphotixin, 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, including 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.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

TNFβ (H-171) is a rabbit polyclonal antibody raised against amino acids 35-205 of TNFβ of human origin.

**PRODUCT**

Each vial contains 200 µg IgG 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.

**protocols**

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

**APPLICATIONS**

TNFβ (H-171) is recommended for detection of TNFβ 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). Suitable for use as control antibody for TNFβ siRNA (h): sc-37218, TNFβ siRNA (m): sc-37219, TNFβ shRNA Plasmid (h): sc-37218-SH, TNFβ shRNA Plasmid (m): sc-37219-SH, TNFβ shRNA (h) Lentiviral Particles: sc-37218-V and TNFβ shRNA (m) Lentiviral Particles: sc-37219-V.

Molecular Weight of TNFβ: 19.25 kDa.

**DATA**

![Western blot analysis of human recombinant TNFβ (A,B).](image)

![Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse spleen tissue showing extracellular localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells (B).](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**MONOS Satisfaction Guaranteed**

Try TNFβ (E-6): sc-28345 or TNFβ (D-10): sc-48410, our highly recommended monoclonal alternatives to TNFβ (H-171).