

TNF α

Tumor Necrosis Factor

human, recombinant, *E. coli*

Cat. No.	Amount
PR-430	50 μ g

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 5 mM MgCl₂, 10% glycerol and BSA as carrier.

Activity

2x10⁸ units/mg

Purity

≥ 95% by SDS-PAGE

Description

Tumor Necrosis Factor α (TNF α), named for its antitumour properties, is a vital member of the multifunctional TNF superfamily and has important roles in immunity and cellular remodelling as well as influencing apoptosis and cell survival. Its central role in inflammation has led to the development of TNF α antagonists as effective therapies for rheumatoid arthritis and inflammatory bowel disease. It is known that TNF α is a crucial cytokine in the establishment and maintenance of inflammation in multiple autoimmune diseases.

In addition to its established role in the immune system, TNF α exerts complex regulatory actions on adipose tissue. TNF α affects many aspects of adipocyte function, from adipocyte development to lipid metabolism.

Selected References:

- Meager *et al.* (1987) Quantification of interferons by anti-viral assays and their standardization. *Lymphokines and Interferons-A Practical Approach*. IRL, Oxford:129.
- Roilides *et al.* (2003) Immunomodulation of invasive fungal infections. *Infectious Disease Clinics of North America* **16**:193.
- Reimold (2002) TNF α as therapeutic target: new drugs, more applications. *Curr. Drug Targets Inflamm. Allergy* **1**:377.
- Szlosarek *et al.* (2003) Tumor necrosis factor alpha: a potential target for the therapy of solid tumours. *Lancet Oncol.* **4**:565.
- Warne (2003) Tumor necrosis factor alpha: a key regulator of adipose tissue mass. *J. Endocrinol.* **177**:351.
- Agnello *et al.* (2003) Cytokines and transcription factors that regulate T helper cell differentiation: New players and new insights. *Journal of Clinical Immunology* **23**:147.