

32-1789: rmTNF a Recombinant Protein

Alternative Name : Tumor necrosis factor, Cachectin, TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, TNF, TNFA, TNFSF2.

Description

Source : Escherichia Coli. TNF-a Rhesus Macaque Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 157 amino acids and having a molecular mass of 17.3kDa. The TNFA Rhesus Macaque is purified by proprietary chromatographic techniques. Tumor necrosis factor is a cytokine involved in systemic inflammation and is a member of a group of cytokines that all stimulate the acute phase reaction. TNF is mainly secreted by macrophages. TNF causes apoptotic cell death, cellular proliferation, differentiation, inflammation, tumorigenesis and viral replication, TNF is also involved in lipid metabolism, and coagulation. TNF's primary role is in the regulation of immune cells. Dysregulation and, in particular, overproduction of TNF have been implicated in a variety of human diseases- autoimmune diseases, insulin resistance, and cancer.

Product Info

Amount : 20 µg
Purification : Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content : Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH 7.4 and 5% trehalose.
Storage condition : Lyophilized Tumor Necrosis Factor-a although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TNF-a should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid : VRSSSRTPSD KPAHVAVANP QAEGQLQWLN RRANALLANG VELTDNQLVV PSEGLYLIYS QVLFKGQGCP SNHVLLTHTI SRIAVSYQTK VNLLSAIKSP CQRETPEGAE AKPWYEPIYL GGVFQLEKGD RLSAEINLPD YLDFAESGQV YFGIIL.

Application Note

It is recommended to reconstitute the lyophilized Tumor Necrosis Factor-alpha in sterile 18M-cm H2O not less than 100Åµg/ml, which can then be further diluted to other aqueous solutions. The ED50 as determined by a cytotoxicity assay using murine L929 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 Åµg 107 IU/mg in the presence of actinomycin D.

