Recombinant Human Tumor Necrosis Factor alpha
(TNF-a)

Certificate of Analysis and Data Sheet

Description	:	Tumour necrosis factor alfa or TNF-a is a nonglycosylated cytokine produced from E.coli using rDNA technology. TNF alpha-1a is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells and certain other target cells. Recombinant Human TNF-alpha is a 17.4 kDa protein containing 157 amino acid residues.
Source	:	E.coli
Catalog #	:	050530
Expiry date	:	If store at -20°C stable until 07/2006
Formulation	:	The sterile filtered solution was lyophilized with 3mM Tris, p.H. 8.0.
Stability	:	The lyophilized protein is stable for a few weeks at room temperature, but best stored at -20°C. Reconstituted TNF-alpha should be stored in working aliquots at -20°C.
Biological Activity	:	The ED50 as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is < 0.05 ng/ml, corresponding to a specific activity of > 2 x 107 units/mg.
Purity	:	Greater than 97% by SDS-PAGE and HPLC analyses. Endotoxin level is less than 0.1 ng per µg (1EU/µg).
Molecular weight	:	17.3 KD+/-10% determined by reduced SDS-PAGE.
Isoelectric Point	:	The main zone between 4.0~5.0 analysis by IEF.
UV scan	:	The maximal absorption wave is 275+/-3nm.
Amino-Acid Sequence	:	The sequence of the first fifteen N-terminal amino acids was determined and was found to be Val-Arg-Ser-Ser-Ser-Arg-Thr- Pro-Ser-Asp-Lys-Pro-Val-Ala-His
Residual DNA	:	less than 10ng/mg analysis by solid phase blot.
Residual host cell protein	:	less than 0.1% analysis by ELISA.
Usage	:	For research use only.