

Tumor Necrosis Factor-Alpha Rat Recombinant

Item Number	rAP-0764
Synonyms	TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, Cachectin, DIF, TNFA, TNFSF2.
Description	Tumor Necrosis Factor-a Rat Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 157 amino acids and having a molecular mass of 17339.44 Dalton. The TNF-alpha is purified by standard chromatographic techniques.
Uniprot Accesion Number	P16599
Amino Acid Sequence	MLRSSSQNSS DKPVVHVVAN HQAEEQLEWL SQRANALLAN GMDLKDNLV VPADGLYLIY SQVLFKGGQC PDYVLLTHTV SRFATSYQEK VSLLSAIKSP CPKDTPEGAE LKPWYEPMYL GGVSQLEKGD LLSAEVNLPK YLDITESGQV YFGVIAL.
Source	Escherichia Coli.
Physical Appearance and Stability	Sterile Filtered White lyophilized (freeze-dried) powder. 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.
Formulation and Purity	The concentrated protein solution (1mg/ml) was lyophilized from 20mM phosphate buffer and 0.1M NaCl. Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Application	
Solubility	It is recommended to reconstitute the lyophilized Tumor Necrosis Factor-alpha in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.
Biological Activity	The ED50 as determined by the cytotoxicity of murine L929 cells in the presence of Actinomycin D is < 0.05ng/ml, corresponding to a Specific Activity of 20,000,000 IU/mg.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**