

Recombinant Rhesus TNF protein

Cat. No. TNF-1387R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rhesus TNF protein was expressed in Escherichia coli.
Species	Rhesus macaque
Source	E.coli
ProteinLength	157
Description	Tumor necrosis factor alpha (TNF-α), also called cachectin, is the best-know member of the TNF-family, which can cause cell death. This protein is produced by neutrophils, activated lymphocytes, macrophages, NK cells, LAK cells, astrocytes endothelial cells, smooth muscle cells and some transformed cells. TNF-α occurs as a secreted, soluble form and as a membrane-anchored form, both of which are biologically active. The naturally-occurring form of TNF-α is glycosylated, but non-glycosylated recombinant TNF-α has comparable biological activity. The biologically active native form of TNF-α is reportedly a trimer. Rhesus macaque and human TNF-α show approximately 98 % homology at the amino acid level. Two types of receptors for TNF-α have been described and virtually all cell types studied show the presence of one or both of these receptor types.
Form	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4, 5 % trehalose.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	cytotoxicity assay using murine L929 cells is less than 0.05 ng/ml, corresponding to a specific activity of $> 2.0 \times 10^7$ IU/mg in the presence of actinomycin D.
Molecular Mass	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 157 amino acids.
AA Sequence	VRSSSRTPSDKPVAVHVVANPQAEGLQWLNRRANALLANGVELTDNQLVVPSEGL YLIYSQVLFGKGQCPSNHVLLTHTISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKP WYEPIYLGGVFQLEKGDRLSAEINLPDYLDFAESGQVYFGIIL
Endotoxin	Less than 1 EU/μg of rRhTNF-α as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	TNF
Official Symbol	TNF

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Synonyms	TNFSF2, Cachectin, Differentiation-inducing Factor, DIF, Necrosin, Cytotoxin
Gene ID	715467
mRNA Refseq	NM_001047149.1
Protein Refseq	NP_001040614.1
UniProt ID	P48094
SDS-PAGE of TNF-1387R 	