

## Tnf

### Recombinant Rat Tumor Necrosis Factor alpha

<b>Catalog No.</b>	CRT102A CRT102B CRT102C	<b>Quantity:</b>	5 µg 20 µg 1.0 mg
<b>Alternate Names:</b>	TNF-alpha, Cachetin		
<b>Description:</b>	Tumor necrosis factor (TNF) is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/ TNFR1 and TNFRSF1B/ TNFBR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer.		
<b>Gene ID:</b>	24835		
<b>UniProt ID:</b>	P16599		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	17.3 kDa (157 aa), monomer		
<b>Formulation:</b>	Lyophilized from a sterile-filtered aqueous solution containing 10 mM sodium phosphate and 50 mM sodium chloride, pH 7.5.		
<b>Purity:</b>	≥ 95% by reducing and non-reducing SDS-PAGE.		
<b>Endotoxin Level:</b>	≤1 EU/µg of protein by kinetic LAL analysis.		
<b>Biological Activity:</b>	Typical ED <sub>50</sub> ≤ 50 pg/ml, determined by the cytolysis of mouse L929 cells in the presence of Actinomycin D.		
<b>Amino Acid Sequence:</b>	MLRSSSQNSS DKPVVHVVAN HQAEEQLEWLN GMDLKDNQLV VPADGLYLIY SQVLFGQGQC PDYVLLTHTV SRFATSYQEK VSLLSAIKSP CPKDTPEGAE LKPWYEPMYL GGVSQLEKGD LLSAEVNLPK YLDITESGQV YFGVIAL		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> Add sterile distilled water to a concentration of 0.1 mg/ml. <b>DO NOT VORTEX.</b> Allow several minutes for complete reconstitution. Further dilutions should be made in appropriate buffered solutions.		

**Storage & Stability:**

Lyophilized product is stable at room temperature for shipping purposes. After receipt, store at  $\leq 20^{\circ}\text{C}$ . After reconstitution, the preparation is stable for up to one week at  $2-8^{\circ}\text{C}$ . For maximal stability, apportion the reconstituted preparation into working aliquots and store at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$ . For long term storage of reconstituted protein, it is recommended that a carrier protein such as 0.1% BSA or HSA be added. This depends on the particular application employed. **Avoid repeated freeze/thaw cycles.**

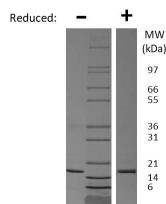
**Rat TNF-alpha Gel**

Figure: 1 ug run under (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Rat TNF-alpha is predicted to have a MW of 17.3 kDa.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



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