


## Rat TNF- $\alpha$ protein

Cat #: PRP1213

Size: 5  $\mu$ g/20  $\mu$ g/100  $\mu$ g/1 mg

### Product Information

	<b>Product Name:</b> Rat TNF- $\alpha$ protein		
<b>REF</b>	<b>Catalog Number:</b> PRP1213	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Purity:</b> >98% as determined by SDS-PAGE		
	<b>Storage:</b> Store at -20°C		<b>Preparation method:</b> <i>E.Coli</i>
	<b>Shipping:</b> The product is shipped at ambient temperature.		

**Background:** Tumor necrosis factor  $\alpha$  (TNF- $\alpha$ ), also known as TNF, TNFA or TNFSF2, is the prototypic cytokine of the TNF superfamily, and is a multifunctional molecule involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. Two receptors, TNF-R1 (TNF receptor type 1; CD120a; p55/60) and TNF-R2 (TNF receptor type 2; CD120b; p75/80), bind to TNF- $\alpha$ . TNF- $\alpha$  protein is produced mainly by macrophages, and large amounts of this cytokine are released in response to lipopolysaccharide, other bacterial products, and Interleukin-1 (IL-1). TNF- $\alpha$  is involved in fighting against the tumorigenesis, thus, is regarded as a molecular insight in cancer treatment.

**Sequence:** Amino acid sequence derived from Rat TNF- $\alpha$  (P16599) (Leu80-Leu235) was expressed.

**Protein length:** The recombinant Rat TNF- $\alpha$  consists of 156 amino acids and has a predicted molecular mass of 17.2 kDa.

**Biological Activity:** Measured in a cytotoxicity assay using L929 mouse fibrosarcoma cells, the ED<sub>50</sub> for this effect is typically 100 pg/mL.

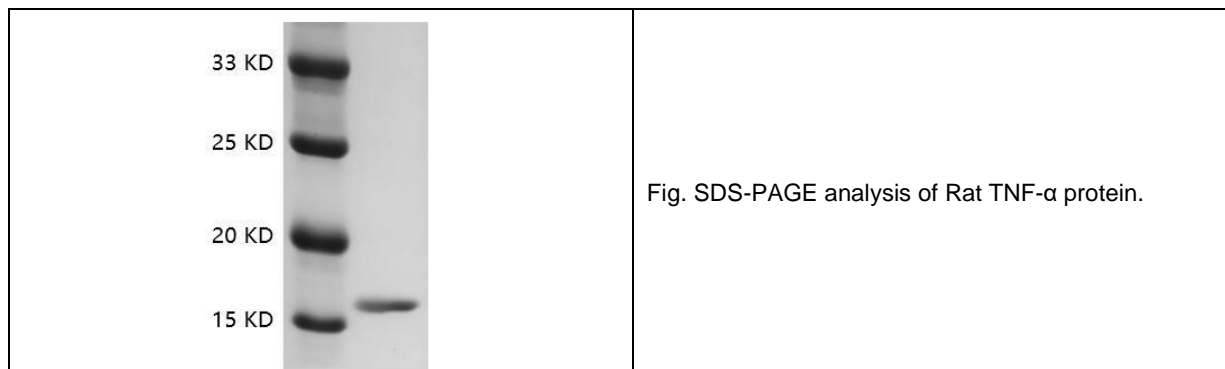
**Endotoxin:** <0.1 EU per  $\mu$ g of the protein as determined by the LAL method.

**Formulation:** Lyophilized from sterile 20 mM tris 50 mM NaCl, pH 8.0.

**Storage Instructions:** Lyophilized Rat TNF- $\alpha$  protein product should be stored desiccated below -18°C. Upon reconstitution,

the protein 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.

**Usage notes:** Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized Rat TNF- $\alpha$  protein using the buffer we provided not less than 100  $\mu$ g/mL, which can then be further diluted to other aqueous solutions.



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