



SHANGHAI GENOMICS

## Recombinant Human Tumor Necrosis Factor- $\alpha$

rHuTNF- $\alpha$

Catalog number: SG3110-08

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### *Specifications and Use*

- Source** ● *Escherichia coli*.
- Molecular Mass** ● 17.5kDa.
- Purity** ● > 97%, as determined by SDS-PAGE and HPLC method.
- Biological Activity** ● TNF- $\alpha$  is fully biologically active when compared to standard. The ED<sub>50</sub> as determined by the cytolysis of murine L929 cells in the presence of Actinomycin D is < 0.05ng/ml, corresponding to a Specific Activity of 2 x10<sup>7</sup> IU/mg.
- Endotoxin Level** ● Less than 1EU/ $\mu$ g of rHuTNF- $\alpha$  as determined by LAL method.
- Formulation** ● Lyophilized from a 0.2 $\mu$ m filtered solution in 15mMNa<sub>2</sub>HPO<sub>4</sub>, 0.3M NaCl , 15mMNaH<sub>2</sub>PO<sub>4</sub>, pH6.8.
- Solubility** ● It is recommended to reconstitute the lyophilized rHuTNF- $\alpha$  in sterile ddH<sub>2</sub>O to prepare a stock solution of no less than 100 $\mu$ g/ml of the cytokine.
- Stability** ● Lyophilized samples are stable for greater than six months from date of receipt at -20 to -70 .  
● Upon reconstitution, this cytokine can be stored under sterile conditions at 2-8 for one month or at -20 to -70 in a manual defrost freezer for three months without detectable loss of activity.  
● Avoid repeated freeze-thaw cycles.
- Usage** ● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE

### ***Human Tumor Necrosis Factor- $\alpha$***

Human TNF $\alpha$  is a 17kD factor produced by macrophages, monocytes, neutrophils, CD4+ T cells and NK cells. A 26kD form of TNF $\alpha$  is expressed as a membrane bound molecule. TNF $\alpha$  is cytolytic and plays an important role in immune regulation. Dimers and trimers of TNF $\alpha$  have been observed.