

## Rat Anti- TNF- $\alpha$

**Catalog Number :** SP-50921      **Quantity size :** 0.1ml (dilute with pH 7.4 0.01 M PBS or antibody diluent )

**Background:** Tumor necrosis factor  $\beta$  (TNF $\beta$ ), also known as lymphotoxin, is a pleiotropic cytokine. TNF $\alpha$ , also known as cachectin, is a smaller cytokine that binds to the same receptors producing a vast array of effects similar to those of TNF $\beta$ . TNF $\beta$  and TNF $\alpha$  share 30% amino acid homology and have similar biological activities. TNF $\beta$  is produced by activated lymphocytes, including CD4+ T helper cell type 1 lymphocytes, CD8+ lymphocytes and certain B lymphoblastoid cell lines. TNF $\alpha$  is produced by several different cell types, which include lymphocytes, neutrophils and macrophages. TNF $\alpha$  and TNF $\beta$  can modulate many immune and inflammatory functions, while having the ability to inhibit tumor growth. Target tumor cells must express TNF receptors 1 and 2 to be killed, with the p55 receptor mediating the cytotoxic response.

### Specificity :

- anti- TNF- $\alpha$  is a rat polyclonal antibody unconjugated
- specific for TNF- $\alpha$  of human
- broadly reactive with mammalian species
- epitope mapping near the amino terminus of TNF- $\alpha$  of human, mouse, rat, hu, mo, rat, Guinea pig, rabbit, dog to cross reacted
- use for western blotting, elisa, immunoprecipitation and immunohistochemistry
- Protein G affinity chromatography purification, Purity > 95%
- Isotype: IgG
- mol wt: 26kDa

### Application :

- Western blotting 1:100-500
- Immunohistochemistry 1:100-500
- ELISA 1:500-1000
- Optimal working dilutions must be determined by the end user.

**Storage:** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody, the antibody is stable for at least six weeks at 2-4 °C.

**Important Note:** This product is only used for research purposes, not for human, therapeutic or diagnostic applications. Please read the product instructions carefully before operation