

## Rat TNFalpha ELISA Kit | TNFalpha elisa kit

TNFalpha Rat ELISA Kit

|                              |                          |                              |
|------------------------------|--------------------------|------------------------------|
| CATALOG #<br><b>AAA13509</b> | REACTIVITY<br><b>Rat</b> | APPLICATIONS<br><b>ELISA</b> |
|------------------------------|--------------------------|------------------------------|

### PRODUCT SYNONYMS

TNFalpha; TNFalpha Rat ELISA Kit; Rat TNFalpha; TNFalpha elisa kit

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                    |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Reactivity                                     | Rat                                                                                                                |
| Assay Type                                     | Sandwich                                                                                                           |
| Samples                                        | Rat serum, plasma, body fluids, tissue lysates or cell culture supernatants                                        |
| Detection Range                                | 15.6 pg/ml-1000 pg/ml (body fluids, tissue lysates or cell culture supernates) 7.8 pg/ml-500 pg/ml (serum, plasma) |
| Sensitivity                                    | < 1 pg/ml                                                                                                          |
| Applicable Applications for TNFalpha elisa kit | ELISA                                                                                                              |
| Application Notes                              | For quantitative detection of TNF? in rat serum, plasma, body fluids, tissue lysates or cell culture supernatants. |
| Preparation and Storage                        | Store at 2-8 degree C for 4 months, or at -20 degree C for 8 months.                                               |

### IMAGES

**Typical Data & Standard Curve**

Results of a typical standard run of a Rat TNFα ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A=not applicable)

|   |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X | Pg/ml | 0     | 15.6  | 31.2  | 62.5  | 125   | 250   | 500   | 1000  |
| Y | OD450 | 0.038 | 0.086 | 0.126 | 0.235 | 0.395 | 0.726 | 1.336 | 2.432 |

Standard Curve (Sample)

### ADDITIONAL INFORMATION

**Related Product Information for TNFalpha elisa kit**

Background: Tumor necrosis factor, formerly known as tumor necrosis factor-alpha or TNF-alpha, is a cytokine involved in systemic inflammation and is a member of a group of cytokines that stimulate the acute phase reaction. It was originally identified in Rat serum after injection with Mycobacterium bovis strain bacillus Calmette-Guerin (BCG) and endotoxin. TNF is primarily produced as a 212-amino acid-long type II transmembrane protein arranged in stable homotrimers. The human TNF gene maps to chromosome 6p21.3, spans about 3 kilobases and contains 4 exons. The primary role of TNF is in the regulation of immune cells. Dysregulation of TNF production has been implicated in a variety of human diseases, including Alzheimer's disease, cancer, major depression, and inflammatory bowel disease (IBD).

Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-TNFalpha polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti- TNFalpha polyclonal antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the TNFalpha amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of TNFalpha can be calculated.

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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