



## **HBT ELISA TEST KIT FOR RAT TNF-ALPHA**

The Hbt Rat TNF-alpha kits have been developed for the quantitative measurement of natural and recombinant rat TNF-alpha in serum, plasma and culture medium.

### **PRINCIPLE OF THE TEST**

The Hbt Rat TNF-alpha ELISA test kit is a solid-phase enzyme-linked immunosorbent assay based on the sandwich principle. Samples and standards are incubated in microtiter wells coated with antibodies recognizing rat TNF-alpha. During this incubation rat TNF-alpha is captured by solid bound antibody. Unbound material present in the sample is removed by washing. Next biotinylated second antibody (tracer) to rat TNF-alpha is added to the wells. If TNF-alpha was present in the sample, the tracer antibodies will bind to the captured TNF-alpha. Excess tracer is removed by washing. Next a streptavidin-peroxidase conjugate is applied to the wells, this conjugate reacts specifically with the biotinylated tracer antibody bound onto the captured TNF-alpha. Excess streptavidin-peroxidase conjugate is removed by washing and substrate, tetramethylbenzidine (TMB), is added to the wells. Colour develops proportionally to the amount of rat TNF-alpha present in the sample. The enzyme reaction is stopped by the addition of citric acid and the absorption at 450 nm is measured with a spectrophotometer. A standard curve is obtained by plotting the absorptions versus the corresponding concentrations of the known standards. The rat TNF-alpha concentration of samples with unknown concentrations, which are run concurrently with the standards, can be determined from the standard curve.

### **SPECIAL FEATURES OF THE KIT**

- Ready-to-use (i.e. pre-coated microwells).
- High specificity.
- High reproducibility
- High sensitivity. The minimum concentration which can be measured is 10 pg/ml of TNF-alpha.
- Large measurable concentration range. Standard curve from 8-2,000 pg/ml.
- Efficient format. Two plates with each twelve 8-well strips allow free choice of batch size for the assay.
- Simple, rapid procedure. Four pipetting steps are required to complete the assay. Working time 4½ hours.

### **AVAILABILITY**

The Hbt Rat TNF-alpha ELISA test is available in a kit for 2 x 96 determinations.

**PRODUCT NUMBER:     HK102     Hbt Rat TNF-alpha ELISA Kit**

For research purposes only.

Caution: Not for use in Humans.