

HBT ELISA TEST KITS FOR HUMAN IFN-alpha

The Hbt Human IFN-alpha kit has been developed for the quantitative measurement of recombinant human IFN- alpha-2b .

The interferon-alpha gene family is comprised of 16 or 17 gene copies per haploid chromosome and a considerable allelic variation. So far more than 30 gene products have been identified all of which have the same similar biological properties although the specific activity may differ. The biological effects of IFN-alpha include antiviral activity; anti-proliferative activity; and modulation of the major histocompatibility complex. Particularly important in the field of oncology is the fact that some tumor cell lines are very sensitive to the anti-proliferative effect of IFN-alpha.

PRINCIPLE OF THE TEST

The Hbt Human IFN-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 human IFN-alpha. During this incubation human IFN-alpha is captured by the solid bound antibody. Unbound materials present in the sample are removed by washing. Next horseradish peroxidase (HRPO) conjugated antibody (tracer) to human IFN-alpha is added to the wells. If human IFN-alpha was present in the sample, the tracer antibodies will bind to the captured human IFN-alpha. The excess tracer is removed by washing and substrate, tetramethylbenzidine (TMB) is added to the wells. Colour develops proportionally to the amount of human IFN- present in the sample. The enzyme reaction is stopped by the addition of citric acid and the absorbance at 450 nm is measured with a spectrophotometer. A standard curve is obtained by plotting the absorptions versus the corresponding concentration of the recombinant IFN-alpha-2b standard. The human IFN-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 (ie. pre-coated microwells).
- High specificity.
- High reproducibility.
- High sensitivity. The minimum concentration which can be measured is 25 pg/ml IFN-alpha.
- Large measurable concentration range. Standard curve from 10-2,000 pg/ml.
- Efficient format. Two plates with twelve 8-well strips each allow free choice of batch size for the assay.
- International standardization. The calibration standards have been standardized against NIH ref. human alpha-2b interferon Gx-201-901-535.
- Simple, rapid procedure. Only three pipetting steps are required to complete the assay. Working time 3 1/2 hours.

AVAILABILITY

The Hbt human IFN-alpha tests are available in kits for 1 x 96 determinations and 2 x 96 determinations.

PRODUCT NUMBER: HK312 Hbt human IFN-alpha ELISA kit, 2 x 96 determinations

Also available:

PRODUCT NUMBER: HK040 Hbt human IFN-alpha ELISA kit, 1 x 96 determinations

For research purposes only.

Caution: Not for use in humans.