

HBT ELISA TEST KITS FOR HUMAN MCP-1

The Hbt Human MCP-1 kits have been developed for the quantitative measurement of natural and recombinant Human MCP-1 in serum, plasma and culture medium. Monocyte chemotactic protein-1 (MCP-1) is a member of the C-C family of chemokines. Chemokines are mediators that share the capacity to induce directional migration of leukocytes. MCP-1 is active on monocytes and basophils, but not on lymphocytes, neutrophils and eosinophils. MCP-1 is believed to play a role in a variety of pathological conditions, including inflammatory and immune reactions, atherosclerosis and neoplasia. Monocyte Chemotactic Protein-1 (MCP-1) is also known as Monocyte Chemotactic and Activating Factor (MCAF).

PRINCIPLE OF THE TEST

The Hbt Human MCP-1 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 MCP-1. During this incubation Human MCP-1 is captured by solid bound antibody. Unbound material present in the sample is removed by washing. Next biotinylated second antibody (tracer) to Human MCP-1 is added to the wells. If MCP-1 was present in the sample, the tracer antibodies will bind to the captured MCP-1. 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 detected MCP-1. The excess streptavidin-peroxidase conjugate is removed by washing and substrate, Tetramethylbenzidine (TMB) is added to the wells. Colour develops proportionally to the amount of human MCP-1 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 human MCP-1 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 MCP-1.
- Large measurable concentration range. Standard curve from 10-2,500 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 Human MCP-1 tests are available in kits for 2x96 determinations.

PRODUCT NUMBER: HK306 Hbt Human MCP-1 ELISA Kit

For research purposes only.
Caution: Not for use in humans.