

IL1B

Human Interleukin-1 beta ELISA Kit

Catalog No. CK402 **Quantity:** 1 x 96 tests

Description: Monocytes are the main source of secreted Interleukin-1 (IL1B). They express predominantly IL1-beta, while Human keratinocytes express large amounts of IL1-alpha. IL1 is produced also by activated macrophages from different sources (alveolar macrophages, Kupffer cells, adherent spleen and peritoneal macrophages) and also by peripheral neutrophil granulocytes. IL1A and IL1B are biologically more or less equivalent pleiotropic factors that act locally and also systemically. IL1B is a potent immunomodulator, which mediates a wide range of immune and inflammatory responses including the activation of B- and T-cells.

The Human IL1-beta ELISA is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human IL1B in serum, plasma, cell culture supernatants and urine. This assay employs an antibody specific for Human IL1B coated on a 96-well plate. Standards and samples are pipetted into the wells and IL1B present in a sample is bound to the wells by the immobilized antibody. The wells are washed and Biotinylated Anti-Human IL1B antibody is added. After washing away unbound Biotinylated antibody, HRP-Streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IL1B bound.

Sensitivity: The minimum detectable dose of IL1B is typically less than 0.3 pg/mL

Reproducibility: Intra-Assay: CV<10%; Inter-Assay: CV<12%

Samples: Serum, plasma, cell culture supernatants and urine.

Recovery: Serum mean recovery of 99% (range 89-108%)
Plasma mean recovery of 100% (range 90-107%)
Cell culture media mean recovery of 100% (range 89-110%)

Reagents Included:

1. Microplate 96-wells coated with Capture Antibody
2. Wash Buffer Concentrate (20x)
3. Standards
4. Assay Diluent A: Standard/Sample-Serum/Plasma
5. Assay Diluent B: Standard/Sample-Culture Medium/Urine
6. Biotinylated Detection Antibody
7. HRP-Streptavidin Concentrate
8. TMB One-Step Substrate Reagent
9. Stop Solution

Storage & Stability: May be stored for up to 6 months at 2-8°C from the date of shipment. Standard should be stored below -20°C (-80°C recommended) after reconstitution. Opened Microplate Wells and reagents may be store for up to 1 month at 2-8°C. Return unused wells to the pouch containing desiccant pack, reseal along entire edge of zipseal.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

