

Product datasheet

Human IL-6 ELISA Kit (Interleukin-6) High Sensitivity ab46042

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Overview

Product name Human IL-6 ELISA Kit (Interleukin-6) High Sensitivity

Detection method Colorimetric

Precision

Intra-assay

| Sample | n | Mean | SD | CV% |
|---------|---|------|----|------|
| Overall | | | | 4.4% |

Inter-assay

| Sample | n | Mean | SD | CV% |
|----------|----|---------|----|-------|
| Sample 1 | 18 | 25pg/ml | 3 | 12.2% |
| Sample 2 | 18 | 12pg/ml | 1 | 8.7% |
| Sample 3 | 18 | 6pg/ml | 1 | 13.7% |
| Sample 4 | 18 | 41pg/ml | 2 | 5.9% |
| Sample 5 | 18 | 31pg/ml | 1 | 4.9% |

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity < 0.8 pg/ml

Range 1.56 pg/ml - 50 pg/ml

Recovery 93 %

Assay time 3h 45m

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Human

Product overview Abcam's IL-6 (Interleukin-6) Human High Sensitivity *in vitro* ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of IL-6 in supernatants,

buffered solutions, serum, plasma and other body fluids. This assay will recognise both natural and recombinant Human IL-6.

A monoclonal antibody specific for IL-6 has been coated onto the wells of the microtiter strips provided. Samples, including standards of known IL-6 concentrations, control specimens or unknowns are pipetted into these wells. During the first incubation, the standards or samples and a biotinylated monoclonal antibody specific for IL-6 are simultaneously incubated. After washing, the enzyme Streptavidin-HRP, that binds the biotinylated antibody is added, incubated and washed. A TMB substrate solution is added which acts on the bound enzyme to induce a colored reaction product. The intensity of this colored product is directly proportional to the concentration of IL-6 present in the samples.

This kit will recognize both endogenous and recombinant Human IL-6.

Get results in 90 minutes with Human IL-6 ELISA Kit ([ab178013](#)) from our SimpleStep ELISA® range.

Tested applications

Suitable for: Sandwich ELISA

Platform

Microplate

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

| Components | Identifier | 1 x 96 tests | 2 x 96 tests |
|--------------------------------------|------------|--------------|--------------|
| 10X Standard Diluent Buffer | Black | 1 x 25ml | 1 x 25ml |
| 200X Wash Buffer | White | 1 x 10ml | 2 x 10ml |
| Plastic Plate Covers | | 1 x 2 units | 1 x 4 units |
| Biotinylated Antibody Diluent | Red | 1 x 7ml | 1 x 13ml |
| Biotinylated anti-IL-6 | Red | 1 x 0.4ml | 2 x 0.4ml |
| Chromogen TMB Substrate Solution | | 1 x 11ml | 1 x 24ml |
| HRP Diluent | Red | 1 x 23ml | 1 x 23ml |
| IL-6 Control | Silver | 2 vials | 4 vials |
| IL-6 Microplate (12 x 8 well strips) | | 1 unit | 2 units |
| IL-6 Standard (Lyophilized) | Yellow | 2 vials | 4 vials |
| Standard Diluent (Human Serum) | | 1 x 7ml | 2 x 7ml |
| Stop Reagent | Black | 1 x 11ml | 2 x 11ml |

| Components | Identifier | 1 x 96 tests | 2 x 96 tests |
|------------------|------------|--------------|--------------|
| Streptavidin-HRP | | 2 x 5µl | 4 x 5µl |

| | |
|---|--|
| Function | Cytokine with a wide variety of biological functions. It is a potent inducer of the acute phase response. Plays an essential role in the final differentiation of B-cells into Ig-secreting cells. Involved in lymphocyte and monocyte differentiation. It induces myeloma and plasmacytoma growth and induces nerve cells differentiation. Acts on B-cells, T-cells, hepatocytes, hematopoietic progenitor cells and cells of the CNS. Also acts as a myokine. It is discharged into the bloodstream after muscle contraction and acts to increase the breakdown of fats and to improve insulin resistance. |
| Involvement in disease | Genetic variations in IL6 are associated with susceptibility to rheumatoid arthritis systemic juvenile (RASJ) [MIM:604302]. An inflammatory articular disorder with systemic-onset beginning before the age of 16. It represents a subgroup of juvenile arthritis associated with severe extraarticular features and occasionally fatal complications. During active phases of the disorder, patients display a typical daily spiking fever, an evanescent macular rash, lymphadenopathy, hepatosplenomegaly, serositis, myalgia and arthritis. Note=A IL6 promoter polymorphism is associated with a lifetime risk of development of Kaposi sarcoma in HIV-infected men. |
| Sequence similarities | Belongs to the IL-6 superfamily. |
| Post-translational modifications | N- and O-glycosylated. |
| Cellular localization | Secreted. |

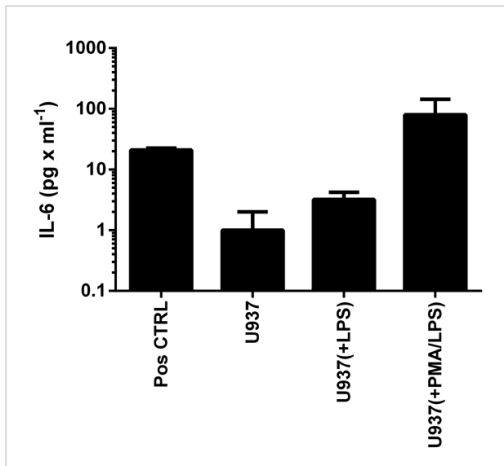
Applications

Our [Abpromise guarantee](#) covers the use of **ab46042** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

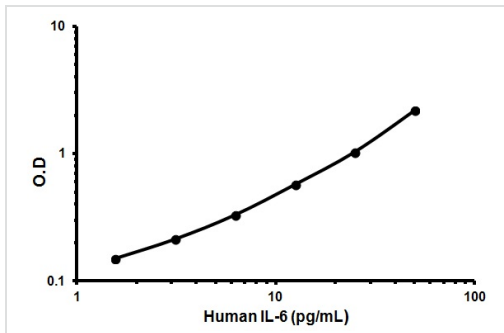
| Application | Abreviews | Notes |
|----------------|-----------|--|
| Sandwich ELISA | | Use at an assay dependent concentration. |

Images



IL-6 was measured in cell culture medium from U937 control cells, or cells stimulated with LPS (1 μ g x mL⁻¹; 6 h) or PMA (10 ng x mL⁻¹; 24 h) and LPS (background signal subtracted) (duplicates +/- SD).

Sandwich ELISA - IL-6 (Interleukin-6) High Sensitivity Human ELISA Kit (ab46042)



Representative Standard Curve using ab46042

Typical Standard Curve

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