

Human CCL23 ELISA Kit ab216169

Recombinant SimpleStep ELISA[®]

[6 Images](#)

Overview

Product name Human CCL23 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

| Sample | n | Mean | SD | CV% |
|--------|---|------|----|------|
| Serum | 8 | | | 8.4% |

Inter-assay

| Sample | n | Mean | SD | CV% |
|--------|---|------|----|------|
| Serum | 3 | | | 5.5% |

Sample type Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 1.54 pg/ml

Range 7.03 pg/ml - 450 pg/ml

Recovery

Sample specific recovery

| Sample type | Average % | Range |
|--------------------------|-----------|------------|
| Cell culture supernatant | 91 | 89% - 92% |
| Serum | 106 | 98% - 117% |
| Other biological fluids | 93 | 88% - 96% |
| Hep Plasma | 98 | 88% - 106% |
| EDTA Plasma | 101 | 98% - 106% |
| Cit plasma | 105 | 93% - 111% |

| | |
|---------------------------|---|
| Assay time | 1h 30m |
| Assay duration | One step assay |
| Species reactivity | Reacts with: Human |
| Product overview | Human CCL23 ELISA Kit (ab216169) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CCL23 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CCL23 with 1.54 pg/ml sensitivity. |

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

| | |
|-----------------|---|
| Notes | CCL23 (Macrophage inflammatory protein 3) is a chemokine involved in the recruitment of monocytes, neutrophils and resting T cells. CCL23 functions by inhibition myeloid progenitor cell proliferation. CCL23 is found at high levels in the synovial fluid of patients with rheumatoid arthritis. |
| Platform | Pre-coated microplate (12 x 8 well strips) |

Properties

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

| Components | 1 x 96 tests |
|---|--------------|
| 10X Human CCL23 Detector Antibody | 1 x 600µl |
| 10X Wash Buffer PT (ab206977) | 1 x 20ml |
| Antibody Diluent 5BI | 1 x 6ml |
| Human CCL23 Capture Antibody (Lyophilized) | 1 vial |
| Human CCL23 Lyophilized Recombinant Protein | 2 vials |
| Plate Seals | 1 unit |
| Sample Diluent NS (ab193972) | 1 x 50ml |

| Components | 1 x 96 tests |
|---|--------------|
| SimpleStep Pre-Coated 96-Well Microplate (ab206978) | 1 unit |
| Stop Solution | 1 x 12ml |
| TMB Development Solution | 1 x 12ml |

Function

Shows chemotactic activity for monocytes, resting T-lymphocytes, and neutrophils, but not for activated lymphocytes. Inhibits proliferation of myeloid progenitor cells in colony formation assays. This protein can bind heparin. Binds CCR1. CCL23(19-99), CCL23(22-99), CCL23(27-99), CCL23(30-99) are more potent chemoattractants than the small-inducible cytokine A23.

Tissue specificity

High levels in adult lung, liver, skeletal muscle and pancreas. Moderate levels in fetal liver, adult bone marrow and placenta. The short form is the major species and the longer form was detected only in very low abundance. CCL23(19-99), CCL23(22-99), CCL23(27-99), CCL23(30-99) are found in high levels in synovial fluids from rheumatoid patients.

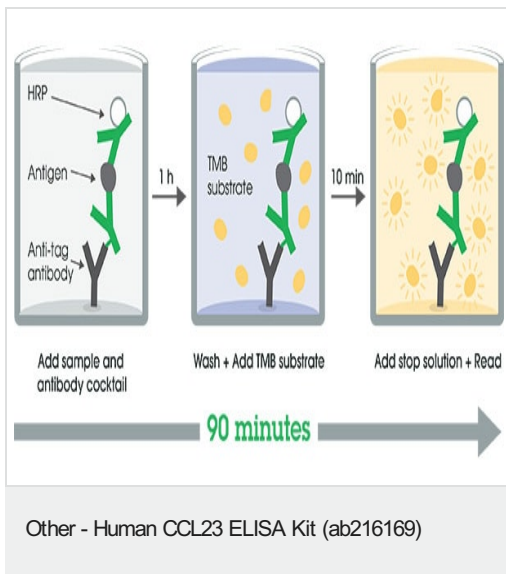
Sequence similarities

Belongs to the intercrine beta (chemokine CC) family.

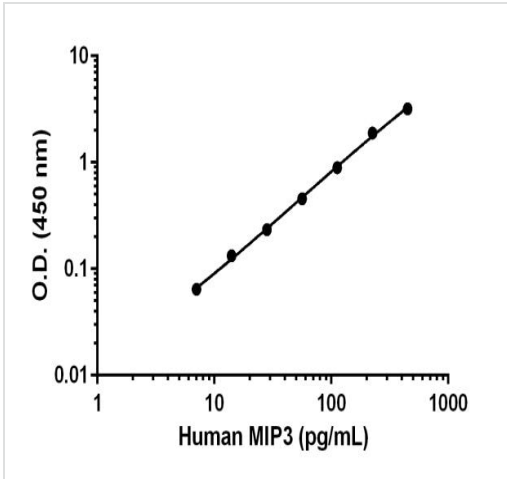
Cellular localization

Secreted.

Images

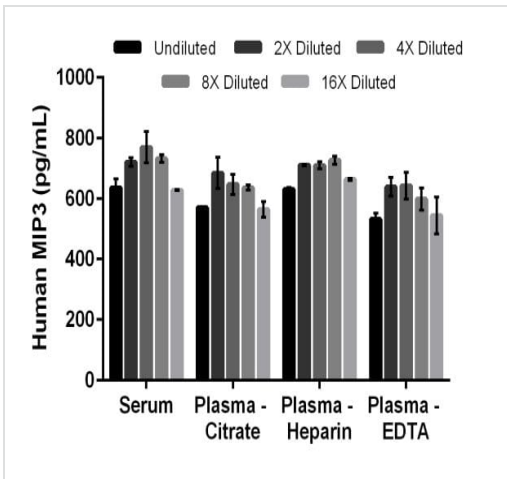


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



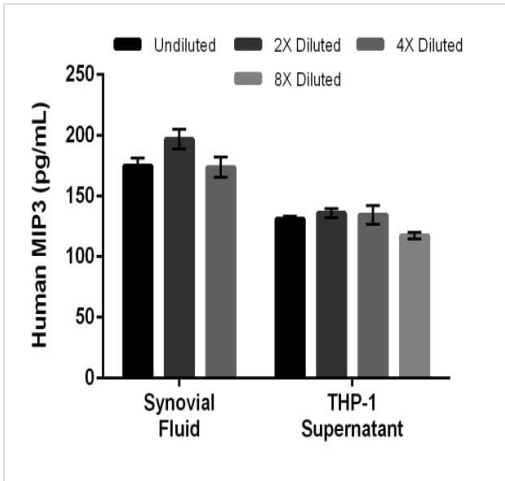
Background-subtracted data values (mean +/- SD) are graphed.

Example of human MIP3 standard curve in Sample Diluent NS.



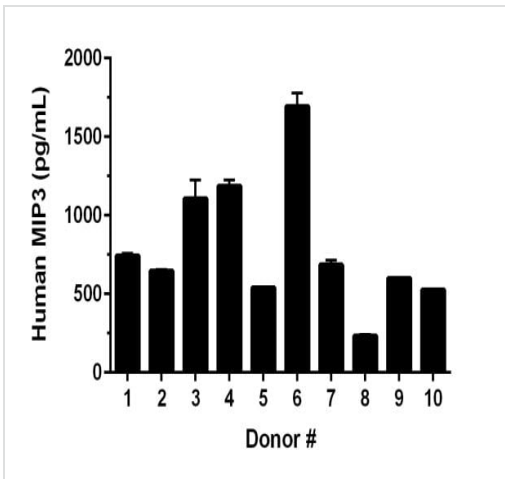
The concentrations of MIP3 were measured in duplicates, interpolated from the MIP3 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 50%, plasma (heparin) 50% and plasma (EDTA) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean MIP3 concentration was determined to be 698 pg/mL in serum, 621 pg/mL in plasma (citrate), 689 pg/mL in plasma (heparin) and 592 pg/mL in plasma (EDTA).

Interpolated concentrations of native MIP3 in human serum and plasma samples.



Interpolated concentrations of native MIP3 in human synovial fluid and THP-1 cell culture supernatant samples



The concentrations of MIP3 were measured in duplicates, interpolated from the MIP3 standard curves and corrected for sample dilution. Undiluted samples are as follows: synovial fluid 25% and THP-1 supernatant 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean MIP3 concentration was determined to be 182 pg/mL in synovial fluid and 130 pg/mL in THP-1 supernatant.



Serum from ten individual healthy human male donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean MIP3 concentration was determined to be 797 pg/mL with a range of 229 – 1,754 pg/mL.

Powered by
recombinant antibodies

| | |
|---|---|
|  Research with confidence Consistent and reproducible results |  Long-term and scalable supply Recombinant technology |
|  Success from the first experiment Confirmed specificity |  Ethical standards compliant Animal-free production |

Sandwich ELISA - Human CCL23 ELISA Kit
(ab216169)

To learn more about the advantages of recombinant antibodies see [here](#).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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