



# Human C-C motif chemokine 5 (CCL5/D17S136E/SCYA5) ELISA kit

|                                     |                                                                                                                                                                                                        |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>                 | CSB-E17375h                                                                                                                                                                                            |
| <b>Protein Biological Process 2</b> | chemokine                                                                                                                                                                                              |
| <b>Abbreviation</b>                 | CCL5                                                                                                                                                                                                   |
| <b>Protein Biological Process 1</b> | Cytokine                                                                                                                                                                                               |
| <b>Target Name</b>                  | chemokine (C-C motif) ligand 5                                                                                                                                                                         |
| <b>Uniprot No.</b>                  | P13501                                                                                                                                                                                                 |
| <b>Alias</b>                        | D17S136E, MGC17164, RANTES, SCYA5, SISd, TCP228, OTTHUMP00000197106 SIS-delta T-cell specific protein p288 beta-chemokine RANTES regulated upon activation, normally T-expressed, and presumably secre |
| <b>Product Type</b>                 | ELISA Kit                                                                                                                                                                                              |
| <b>Immunogen Species</b>            | Homo sapiens (Human)                                                                                                                                                                                   |
| <b>Protein Biological Process 3</b> | Chemotaxis                                                                                                                                                                                             |
| <b>Sample Types</b>                 | serum, plasma, cell culture supernates, tissue homogenates                                                                                                                                             |
| <b>Detection Range</b>              | 15.6 pg/mL-1000 pg/mL                                                                                                                                                                                  |
| <b>Sensitivity</b>                  | 2.307 pg/mL                                                                                                                                                                                            |
| <b>Assay Time</b>                   | 1-5h                                                                                                                                                                                                   |
| <b>Sample Volume</b>                | 50-100ul                                                                                                                                                                                               |
| <b>Detection Wavelength</b>         | 450 nm                                                                                                                                                                                                 |
| <b>Lead Time</b>                    | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.                                                                                               |
| <b>Research Area</b>                | Immunology                                                                                                                                                                                             |
| <b>Gene Names</b>                   | CCL5                                                                                                                                                                                                   |
| <b>Tag Info</b>                     | quantitative                                                                                                                                                                                           |
| <b>Protein Description</b>          | Sandwich                                                                                                                                                                                               |

## Description

This Human CCL5 ELISA Kit was designed for the quantitative measurement of Human CCL5 protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 2.307 pg/mL.



## Target Details

This gene is one of several CC cytokine genes clustered on the q-arm of chromosome 17. Cytokines are a family of secreted proteins involved in immunoregulatory and inflammatory processes. The CC cytokines are proteins characterized by two adjacent cysteines. The cytokine encoded by this gene functions as a chemoattractant for blood monocytes, memory T helper cells and eosinophils. It causes the release of histamine from basophils and activates eosinophils. This cytokine is one of the major HIV-suppressive factors produced by CD8+ cells. It functions as one of the natural ligands for the chemokine receptor CCR5 and it suppresses in vitro replication of the R5 strains of HIV-1, which use CCR5 as a coreceptor.

## Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

## Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human CCL5 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

|       | Sample    | Serum(n=4) |
|-------|-----------|------------|
| 1:100 | Average % | 92         |
|       | Range %   | 87-95      |
| 1:200 | Average % | 104        |
|       | Range %   | 96-107     |
| 1:400 | Average % | 93         |
|       | Range %   | 88-97      |
| 1:800 | Average % | 99         |
|       | Range %   | 94-103     |

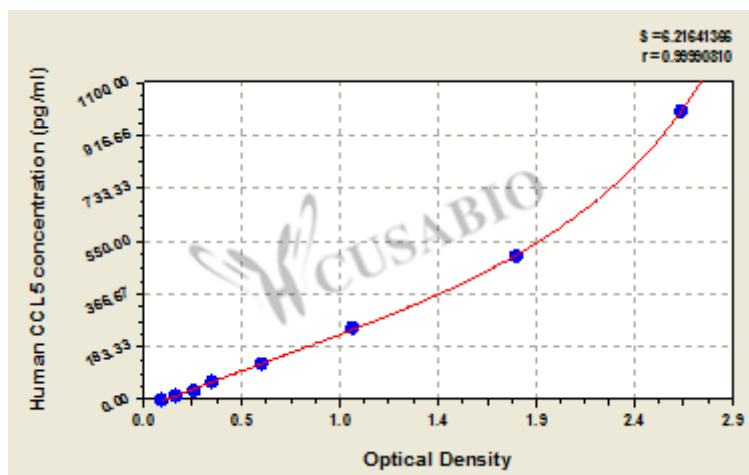
## Recovery

The recovery of human CCL5 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

| Sample Type       | Average % Recovery | Range  |
|-------------------|--------------------|--------|
| Serum (n=5)       | 94                 | 86-98  |
| EDTA plasma (n=4) | 99                 | 92-104 |

## Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



| pg/ml | OD1   | OD2   | Average | Corrected |
|-------|-------|-------|---------|-----------|
| 1000  | 2.671 | 2.542 | 2.607   | 2.511     |
| 500   | 1.848 | 1.776 | 1.812   | 1.716     |
| 250   | 1.026 | 1.007 | 1.017   | 0.921     |
| 125   | 0.575 | 0.583 | 0.579   | 0.483     |
| 62.5  | 0.332 | 0.344 | 0.338   | 0.242     |
| 31.2  | 0.258 | 0.247 | 0.253   | 0.157     |
| 15.6  | 0.160 | 0.172 | 0.166   | 0.070     |
| 0     | 0.098 | 0.094 | 0.096   |           |

## Msds

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{
  "0": {
    "fileurl": "https://www.cusabio.com/uploadfile/msds/MSDS CSB-E17375h.pdf",
    "filename": "MSDS"
  }
}
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