



# Pig monocyte chemotactic protein 1, MCP1 ELISA Kit

|                                     |                                                                                                                                                                                                                          |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>                 | CSB-E13178p                                                                                                                                                                                                              |
| <b>Protein Biological Process 2</b> | chemokine                                                                                                                                                                                                                |
| <b>Abbreviation</b>                 | CCL2                                                                                                                                                                                                                     |
| <b>Protein Biological Process 1</b> | Immunity                                                                                                                                                                                                                 |
| <b>Target Name</b>                  | chemokine (C-C motif) ligand 2                                                                                                                                                                                           |
| <b>Uniprot No.</b>                  | P42831                                                                                                                                                                                                                   |
| <b>Alias</b>                        | GDCF-2, HC11, HSMCR30, MCAF, MCP-1, MCP1, MGC9434, SCYA2, SMC-CF, monocyte chemoattractant protein-1 monocyte chemotactic and activating factor monocyte secretory protein JE small inducible cytokine                   |
| <b>Product Type</b>                 | ELISA Kit                                                                                                                                                                                                                |
| <b>Immunogen Species</b>            | Sus scrofa (Pig)                                                                                                                                                                                                         |
| <b>Protein Biological Process 3</b> | Chemotaxis                                                                                                                                                                                                               |
| <b>Sample Types</b>                 | serum, plasma                                                                                                                                                                                                            |
| <b>Detection Range</b>              | 31.25 pg/mL-2000 pg/mL                                                                                                                                                                                                   |
| <b>Sensitivity</b>                  | 7.81 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>                   | CCL2                                                                                                                                                                                                                     |
| <b>Tag Info</b>                     | quantitative                                                                                                                                                                                                             |
| <b>Protein Description</b>          | Sandwich                                                                                                                                                                                                                 |
| <b>Description</b>                  | This Pig CCL2 ELISA Kit was designed for the quantitative measurement of Pig CCL2 protein in serum, plasma. It is a Sandwich ELISA kit, its detection range is 31.25 pg/mL-2000 pg/mL and the sensitivity is 7.81 pg/mL. |
| <b>Target Details</b>               | This gene is one of several cytokine genes clustered on the q-arm of chromosome 17. Cytokines are a family of secreted proteins involved in                                                                              |



immunoregulatory and inflammatory processes. This protein is structurally related to the CXC subfamily of cytokines. Members of this subfamily are characterized by two cysteines separated by a single amino acid. This cytokine displays chemotactic activity for monocytes and basophils but not for neutrophils or eosinophils. It has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis and atherosclerosis. It binds to chemokine receptors CCR2 and CCR4.

#### 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 pig MCP1 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) |
|-----|-----------|------------|
| 1:1 | Average % | 92         |
|     | Range %   | 87-96      |
| 1:2 | Average % | 98         |
|     | Range %   | 93-102     |
| 1:4 | Average % | 85         |
|     | Range %   | 81-89      |
| 1:8 | Average % | 96         |
|     | Range %   | 93-99      |

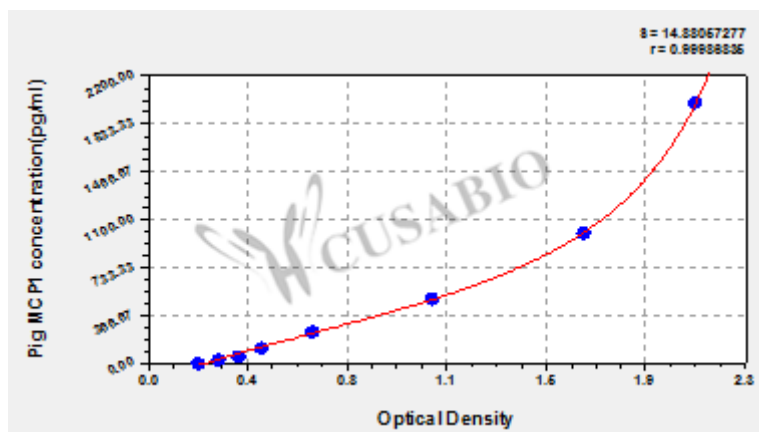
#### Recovery

The recovery of pig MCP1 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)       | 91                 | 88-96 |
| EDTA plasma (n=4) | 85                 | 80-90 |

#### 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 |
|-------|-------|-------|---------|-----------|
| 2000  | 2.078 | 2.069 | 2.074   | 1.880     |
| 1000  | 1.610 | 1.687 | 1.649   | 1.455     |
| 500   | 1.099 | 1.059 | 1.079   | 0.885     |
| 250   | 0.615 | 0.638 | 0.627   | 0.433     |
| 125   | 0.427 | 0.438 | 0.433   | 0.239     |
| 62.5  | 0.342 | 0.349 | 0.346   | 0.152     |
| 31.25 | 0.276 | 0.268 | 0.272   | 0.078     |
| 0     | 0.189 | 0.198 | 0.194   |           |

## Msds

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