# Rat Cluster of Differentiation 68, CD68 ELISA kit

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|---|---|
| **Product Code** | CSB-E13297r |
| **Abbreviation** | CD68 |
| **Target Name** | Cluster of Differentiation 68, CD68 |
| **Uniprot No.** | Q4FZY1 |
| **Product Type** | ELISA Kit |
| **Immunogen Species** | Rattus norvegicus (Rat) |
| **Sample Types** | serum, plasma, tissue homogenates |
| **Detection Range** | 0.625 ng/mL-40 ng/mL |
| **Sensitivity** | 0.156 ng/mL |
| **Assay Time** | 1-5h |
| **Sample Volume** | 50-100ul |
| **Detection Wavelength** | 450 nm |
| **Lead Time** | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx. |
| **Research Area** | Others |
| **Tag Info** | quantitative |
| **Protein Description** | Sandwich |
| **Description** | |
| | The rat CD68 Elisa kit is suitable for quantitatively measuring human MLCK in serum, plasma, or tissue homogenates. This assay employs the sandwich enzyme immunoassay technique and enzyme-substrate chromogenic reaction. The color develops positively to the amount of MLCK in samples. The color development is stopped and the intensity of the color is measured. This kit displays many advantages, including high sensitivity, strong specificity, good linearity, high precision and recovery, and lot-to-lot consistency. |
| | CD68 is a heavily glycosylated glycoprotein highly expressed in macrophages and other mononuclear phagocytes. It is commonly used as a histochemical/cytochemical marker of inflammation associated with the involvement of human monocytes and macrophages. CD68 alone or in combination with other cell markers of tumor-associated macrophages showed a good predictive value as a prognostic marker of survival in cancer patients. CD68 is mainly located in the endosomal/lysosomal compartment but can rapidly shuttle to the cell surface. It can bind oxLDL, phosphatidylserine, and apoptotic cells and serve as a receptor for malaria sporozoite in liver infection. |
| **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 rat CD68 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 % | 93 |
| | Range % | 86-96 |
| 1:2 | Average % | 102 |
| | Range % | 98-105 |
| 1:4 | Average % | 91 |
| | Range % | 87-95 |
| 1:8 | Average % | 95 |
| | Range % | 91-98 |

## Recovery

The recovery of rat CD68 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) | 89 | 85-92 |
| EDTA plasma (n=4) | 101 | 94-104 |

## Typical

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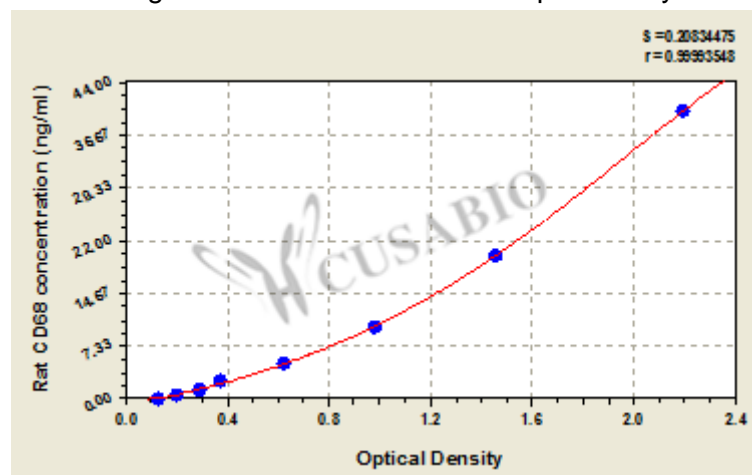


| ng/ml | OD1 | OD2 | Average | Corrected |
|---|---|---|---|---|
| 40 | 2.210 | 2.188 | 2.199 | 2.063 |
| 20 | 1.484 | 1.444 | 1.464 | 1.328 |
| 10 | 0.971 | 1.008 | 0.990 | 0.854 |
| 5 | 0.622 | 0.645 | 0.634 | 0.498 |
| 2.5 | 0.378 | 0.387 | 0.383 | 0.247 |
| 1.25 | 0.304 | 0.299 | 0.302 | 0.166 |
| 0.625 | 0.222 | 0.212 | 0.217 | 0.081 |
| 0 | 0.138 | 0.134 | 0.136 | |

## Msds

{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E13297r.pdf","filename":"MSDS"}}