

Datasheet for ABIN2648781 **CCL2 ELISA Kit**

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Overview

Quantity:	96 tests
Target:	CCL2
Reactivity:	Human
Application:	ELISA

Product Details

Sample Type:	Serum, Plasma, Cell Culture Cells
Detection Method:	Colorimetric
Sensitivity:	15 pg/ml

Characteristics: Monocyte chemoattractant protein-1 (MCP-1) called also monocyte chemotactic protein-1. MCP-1 is an 8.6 kDa protein and belongs to the family of chemotactic cytokines known as Chemokines. MCP-1 is expressed by monocytes, vascular endothelial cells, smooth muscle cells, glomerular mesangial cell, osteoblastic cells, and human pulmonary type-2-like epithelial cells in culture. MCP-1 exhibits chemotactic activity for monocytes/macrophages, basophils, T lymphocytes, particularly memory T cells and natural killer cells and neural stem cells. Elevated levels of MCP-1 are detected during inflammation and immune responses. MCP-1 activity is also important in wound healing as shown by delayed wound repair in MCP-1 deficient mice. MCP-1 is implicated in the pathogenesis of disease states that involve monocyte/macrophage infiltrates, such as psoriasis, rheumatoid arthritis and recruitment of monocytes to the arterial wall in atherosclerosis. In addition to its chemotactic function, MCP-1 also induces the expression of IL-10 from macrophages, which favors a TH2 immune response. MCP-1 is a glycopeptide containing one potential N-linked glycosylation site. The extent of MCP-1 glycosylation influences its chemotactic potency and half-life in vivo.

Target Details

Target:	CCL2
Alternative Name:	MCP-1 (CCL2 Products)
Pathways:	Cellular Response to Molecule of Bacterial Origin, Positive Regulation of Immune Effector Process, ER-Nucleus Signaling, Unfolded Protein Response, The Global Phosphorylation Landscape of SARS-CoV-2 Infection

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Sample Volume:	100 µL
Assay Time:	3.5 h
Plate:	Pre-coated
Protocol:	Human Monocyte Chemoattractant Protein-1 (MCP-1) ELISA Assay Kit employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for MCP-1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any MCP-1 present is bound by the immobilized antibody. Following incubation unbound samples are removed during a wash step, and then a detection antibody specific for MCP-1 is added to the wells and binds to the combination of capture antibody-MCP-1 in sample. Following a wash to remove any unbound combination, and enzyme conjugate is added to the wells. Following incubation and wash steps a substrate is added. A colored product is formed in proportion to the amount of MCP-1 present in the sample. The reaction is terminated by addition of acid and absorbance is measured at 450nm. A standard curve is prepared from seven MCP-1 standard dilutions and MCP-1 sample concentration determined.
Restrictions:	For Research Use only

Handling

Storage:	4 °C
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