

Human chemokine (C-C motif) ligand 2 ELISA Kit | CCL2 elisa kit

Human monocyte chemotactic protein 1/monocyte chemotactic and activating factor, MCP-1/MCAF ELISA Kit

CATALOG #
AAA79454

REACTIVITY
Human

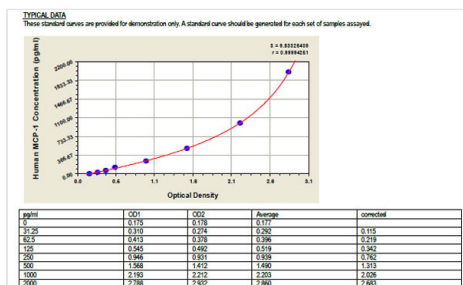
PRODUCT SYNONYMS

chemokine (C-C motif) ligand 2; Human monocyte chemotactic protein 1/monocyte chemotactic and activating factor; MCP-1/MCAF ELISA Kit; MCP-1/MCAF ELISA kit; 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; MCP-1/MCAF; CCL2 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human CCL2. No significant cross-reactivity or interference between Human CCL2 and analogues was observed.
Sequence Length	99
Samples	Serum, plasma, urine, saliva, cerebrospinal fluid (CSF), ascitic fluid, cell culture supernates, tissue homogenates
Detection Range	31.25 pg/ml -2000 pg/ml
Sensitivity	30.184pg/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Protein Biological Process 1	Cytokine
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CCL2 elisa kit	Introduction: Chemokine (C-C motif) ligand 2 (MCP-1) is a small cytokine belonging to the CC chemokine family that is also known as monocyte chemotactic protein-1 (MCP-1). MCP-1 recruits monocytes, memory T cells, and dendritic cells to sites of tissue injury and infection. This chemokine is produced as a protein precursor containing signal peptide of 23 amino acids and a mature peptide of 76 amino acids. It is a monomeric polypeptide, with a molecular weight of approximately 13kDa. As with many other CC chemokines, MCP-1 is located on chromosome 17 in humans. The cell surface receptors that bind MCP-1 are CCR2 and CCR4. It is found at the site of tooth eruption and bone degradation. In the bone, MCP-1 is expressed by mature osteoclasts and osteoblasts and is under the control of nuclear factor kappaB (NFkappaB). In human osteoclasts, it has been shown that MCP-1 and RANTES (regulated on activation normal T cell expressed and secreted) are unregulated by RANKL (receptor activator of NFkappaB ligand). Both MCP-1 and RANTES were also shown to induce the formation of TRAP-positive, multinuclear cells from M-CSF-treated monocytes in the absence of RANKL, but produced osteoclasts that lacked cathepsin K expression and resorptive capacity. It is proposed that MCP-1 and RANTES act as autocrine loop in human osteoclast differentiation. MCP-1 causes the degranulation of basophils and mast cells, an effect potentiated by pre-treatment with IL-3 and other cytokines. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to MCP-1. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated polyclonal antibody preparation specific for MCP-1 and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain MCP-1, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of MCP-1 in the samples is then determined by comparing the O.D. of the samples to the standard curve.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4506841
NCBI GeneID	6347
NCBI Accession #	NP_002973.1
NCBI GenBank Nucleotide #	NM_002982.3
UniProt Accession #	P13500; Q9UDF3; B2R4V3
Molecular Weight	11,025 Da
NCBI Official Full Name	C-C motif chemokine 2
NCBI Official Synonym Full Names	chemokine (C-C motif) ligand 2
NCBI Official Symbol	CCL2
NCBI Official Synonym Symbols	HC11; MCAF; MCP1; MCP-1; SCYA2; GDCF-2; SMC-CF; HSMCR30
NCBI Protein Information	C-C motif chemokine 2; small-inducible cytokine A2; monocyte secretory protein JE; monocyte chemotactic protein 1; monocyte chemoattractant protein 1; monocyte chemoattractant protein-1; monocyte chemotactic and activating factor; small inducible cytokine subfamily A (Cys-Cys), member 2; small inducible cytokine A2 (monocyte chemotactic protein 1, homologous to mouse Sig-je)
UniProt Protein Name	C-C motif chemokine 2
UniProt Gene Name	CCL2
UniProt Synonym Gene Names	MCP1; SCYA2; MCAF; MCP-1
UniProt Entry Name	CCL2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.