

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

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

CATALOG #
AAA80688

REACTIVITY
Rat

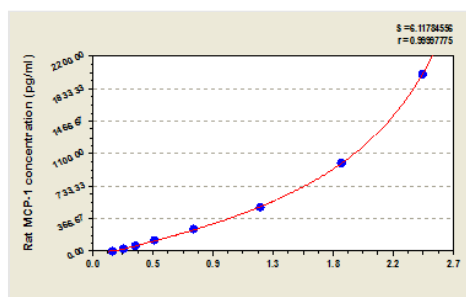
PRODUCT SYNONYMS

chemokine (C-C motif) ligand 2; Rat 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; CCL2 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of Rat CCL2. No significant cross-reactivity or interference between Rat CCL2 and analogues was observed.
Sequence Length	125
Samples	Serum, plasma, cell culture supernates, tissue homogenates
Detection Range	3.12 pg/ml -200 pg/ml
Sensitivity	0.78 pg/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	Immunity
Protein Biological Process 2	chemokine
Protein Biological Process 3	Chemotaxis
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.
--	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	126723026
NCBI GeneID	100009130
NCBI Accession #	NP_001075763.1
NCBI GenBank Nucleotide #	NM_001082294.1
UniProt Accession #	P28292
Molecular Weight	13,776 Da
NCBI Official Full Name	C-C motif chemokine 2
NCBI Official Symbol	CCL2
NCBI Protein Information	C-C motif chemokine 2; MCP-1; small-inducible cytokine A2; monocyte chemotactic protein 1; monocyte chemoattractant protein 1; monocyte chemoattractant protein-1
UniProt Protein Name	C-C motif chemokine 2
UniProt Gene Name	CCL2
UniProt Synonym Gene Names	SCYA2; MCP-1
UniProt Entry Name	CCL2_RABIT

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.