

Active Recombinant Rat Ccl2 protein, His-tagged

Cat. No. Ccl2-6111R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Rat Ccl2 protein(P14844)(24~148 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Rat
Source	E.coli
ProteinLength	24-148 aa
Form	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Bio-activity	Monocyte Chemotactic Protein 1 (MCP1), also known as C-C motif chemokine 2(CCL2), is a member of the β (C-C) subfamily of chemokines that is a chemoattractant for monocytes and basophils. Rat CCL2 is secreted as a 14 kDa glycoprotein monomer but noncovalent dimers probably occur. CCL2 is best known as a chemotactic agent for mononuclear cells. Thus, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of recombinant rat MCP1 on the THP-1 cell line. Briefly, THP-1 cells were seeded into the upper chambers (150 μ L cell suspension, 10^6 cells/mL in RPMI 1640 with FBS free) and MCP1 (0.01 ng/mL, 0.1 ng/mL, 1 ng/mL, 10 ng/mL, 100 ng/mL and 1000 ng/mL diluted separately in serum free RPMI 1640) was added in lower chamber with a polycarbonate filter (8 μ m pore size) used to separate the two compartments. After incubation at 37°C with 5% CO ₂ for 2h, the filter was removed, then cells in low

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chamber were observed by inverted microscope at low magnification ($\times 100$) and the number of migrated cells were counted at high magnification ($\times 400$) randomly (five fields for each filter). Result shows MCP1 is able to induce migration of THP-1 cells. The migrated THP-1 cells in low chamber at low magnification ($\times 100$) were shown. Five fields of each chamber were randomly chosen, and the migrated cells were counted at high magnification ($\times 400$). The optimum chemotaxis of recombinant rat MCP1 occurs at 0.01-0.1 ng/mL.

Molecular Mass	15.4kDa
Endotoxin	<1.0EU per 1 μ g (determined by the LAL method).
Purity	> 97% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	Ccl2 chemokine (C-C motif) ligand 2 [<i>Rattus norvegicus</i>]
Official Symbol	Ccl2
Synonyms	CCL2; chemokine (C-C motif) ligand 2; C-C motif chemokine 2; small inducible gene JE; small inducible cytokine A2; small-inducible cytokine A2; monocyte chemotactic protein 1; monocyte chemoattractant protein 1; monocyte chemoattractant protein-1; immediate-early serum-responsive JE protein; immediate-early serum-responsive protein JE; MCP-1; Scya2; Sigje;

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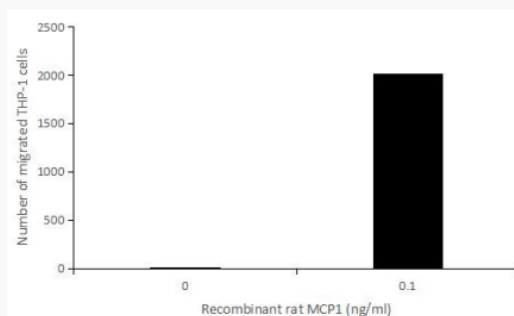
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Gene ID 24770

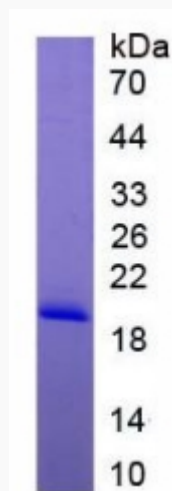
mRNA Refseq NM_031530

Protein Refseq NP_113718

Activity



SDS-PAGE



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