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## Product Datasheet

### Human MCP1 / CCL2 protein, His tag (active), Unconjugated GTX00415-PRO

Article Name	Human MCP1 / CCL2 protein, His tag (active), Unconjugated
Biozol Catalog Number	GTX00415-PRO
Supplier Catalog Number	GTX00415-pro
Alternative Catalog Number	GTX00415-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	<a href="#">6347</a>
UniProt	<a href="#">P13500</a>
Buffer	Reconstitute with 20mM Tris (pH8.0) and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris (pH8.0), 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Gln24~Thr99 (NP_002973.1)

#### Application Notes

MCP-1 (monocyte chemoattractant protein 1), also known as CCL2 (C-C motif chemokine 2), is a small cytokine that belongs to the CC chemokine family. MCP-1 has been described as a chemoattractant for monocytes and proven to be able to induce chemotactic migration of THP-1 cells. Therefore, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of MCP-1 on the human monocytic cell line THP-1. Briefly, THP-1 cells were seeded into the upper chambers (100  $\mu$ l cell suspension, 10<sup>6</sup> cells/ml in RPMI-1640 with 0.5% FBS) and MCP-1 (25 and 50 ng/ml diluted separately in serum free RPMI-1640) was added in lower chamber with a polycarbonate filter (8  $\mu$ m pore size) used to separate the two compartments. After incubation at 37C with 5% CO<sub>2</sub> for 3h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (\*100) and the number of migrated cells were counted at high magnification (\*400) randomly (five fields for each filter). MCP-1 is able to induce migration of THP-1 cells, and the optimum chemotactic concentration of MCP-1 is about 25 ng/ml.