

Datasheet for ABIN6952161

CCL2 Protein (AA 24-99) (Biotin)[Go to Product page](#)**2** Images

Overview

Quantity:	100 µg
Target:	CCL2
Protein Characteristics:	AA 24-99
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CCL2 protein is labelled with Biotin.
Application:	Cell Migration Assay (CMA), Flow Cytometry (FACS)

Product Details

Sequence:	QPDAINAPVT CCYNFTNRKI SVQRLASYRR ITSSKCPKEA VIFKTIVAKE ICADPKQKWV QDSIDHLDKQ TQTPKT
Characteristics:	Biotinylated Recombinant Human CCL2 (MCP-1)
Purity:	> 97 % by SDS PAGE
Endotoxin Level:	<0.01 EU per 1µg of the protein by the LAL method
Biological Activity Comment:	EC50 = 0.25-1.2 nM determined by Migration Assay of recombinant CCR2 containing cells

Target Details

Target:	CCL2
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Target Details

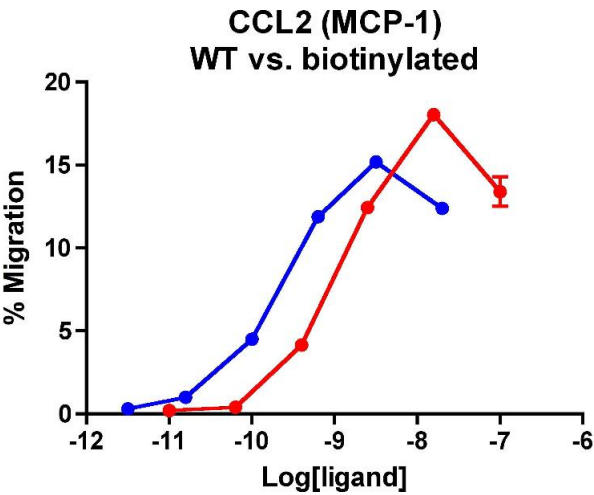
Alternative Name:	CCL2 (MCP-1) (CCL2 Products)
Background:	Monocyte chemoattractant protein-1 (MCP-1) (CCL2) is produced by many cell types at sites of inflammation. It regulates chemotaxis and transendothelial migration of monocytes, as well as memory T cells and natural killer cells by interacting with their membrane surface receptor CCR2. MCP-1 has also been implicated in a number of disease states, such as rheumatoid arthritis, psoriasis, atherosclerosis, autoimmune diseases, tumor progression, and HIV infection. This cytokine displays chemotactic activity for monocytes and basophils but not for neutrophils or eosinophils. It binds to chemokine receptors CCR2 and CCR4.
Molecular Weight:	11.085 kDa
UniProt:	P13500
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.
Restrictions:	For Research Use only

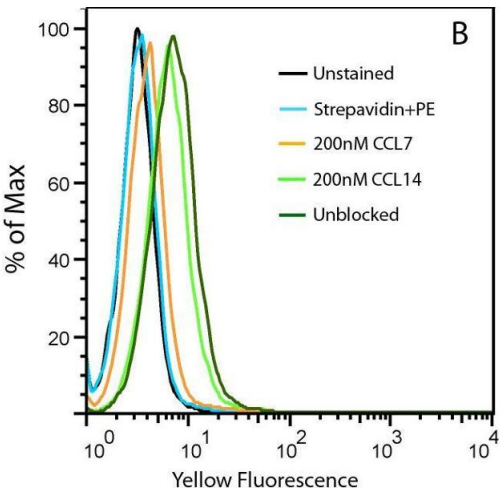
Handling

Format:	Lyophilized
Reconstitution:	Spin tube prior to resuspending. Recommended at 100 µg/mL in sterile water
Storage:	-20 °C, -80 °C
Storage Comment:	12 months from date of receipt, -20 to -70 °C as supplied. Suggest to use immediately after reconstitution 1 month at -20 to -70 °C under sterile conditions after reconstitution.
Expiry Date:	12 months



Cellular Assay

Image 1. Cells expressing recombinant CCR2 were assayed for migration through a transwell filter at various concentrations of MCP-1. Responses are expressed as the % of total input cells (Blue: wild type; Red: biotinylated).



Flow Cytometry

Image 2. Uptake of 20nM CCL2-biotin by THP1 cells (dark green trace) is abolished by the addition of CCL7 (orange) but not CCL14 (light green), suggesting a CCR2-specific internalization. THP1 cells are not stained in the absence of CCL2-biotin (cyan).