

CCL2/MCP-1, Human, Recombinant

Cat. No. : PCK111

General Information

Synonyms	Monocyte Chemotactic Protein-1; MCP-1
Species	Human
Expression host	E.coli
Sequence	QPDAINAPVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWVQDSMD HLDKQTQTPKT with polyhistidine tag at the N-terminus.
Accession	P13500.1
Tag	His-tag at the N-terminus
Mol mass	9.49 kDa
Expiration date	12 months
Bio activity	Measure by its ability to chemoattract BaF3 cells transfected with human CCR2A. The ED50 for this effect is < 20 ng/mL.

Product feature

Purity	> 95% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

CCL2, also known as MCP-1, is belonging to the CC ? chemokine family. CCL2 can be identified in endothelial cell s, smooth muscle cells and monocytes as the results of reaction to several atherogenic stimulants, such as CD40 ligand, (IL-1β) and oxidized low density lipoprotein , interleukin-1β platelet derived growth factor (PDGF). Recent study shows that in vivo MCP1 have several critical roles in atherosclerosis. Additionally, MCP-1 has been proved involving in monocytic infiltration of tissues during several inflammatory diseases, and has been implicated in macrophage-mediated tumor growth inhibition in mice. In addition, CCL2 has been shown to have direct effects on tumor cells in an autocrine and paracrine fashion in multiple cancers, including sarcoma, lung, cervix, ovary, breast, and prostate.

SDS-PAGE

