

Recombinant Human CCL2 / C-C Motif Chemokine Ligand 2,

Animal Free & Carrier Free

Cat #: C-CYP343

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

CCL2, also known as MCP-1, is belonging to the CC β chemokine family. CCL2 can be identified in endothelial cells, smooth muscle cells and monocytes as the results of reaction to several atherogenic stimulants, such as CD40 ligand, (IL-1 β) and oxidized low density lipoprotein, interleukin-1 β 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.

Product Information

Source: *Escherichia Coli*.

Purity: >95% as determined by SDS-PAGE. Ni-NTA chromatography.

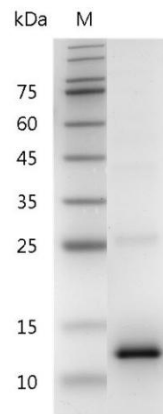
Biological Activity: Measure by its ability to chemoattract BaF3 cells transfected with human CCR2A. The ED50 for this effect is <20 ng/mL.

Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

Amino acid sequence:

QPDAINAPVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWWVQDSMDHLDKQTQTPKT with polyhistidine tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1xPBS, pH 7.4.



SDS-PAGE analysis of recombinant human CCL2

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.