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www.rockland.com
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+1 484.791.3823

Datasheet for 009-001-B60

MCP-1 Human Recombinant Protein

Overview

Description:	MCP-1 Human Recombinant Protein - 009-001-B60
Item No.:	009-001-B60
Size:	20 µg
Applications:	SDS-PAGE
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	MCP-1, or Monocyte chemoattractant protein 1, of the intercrine beta (chemokine CC) family, is a chemotactic factor that attracts monocytes and basophils but not neutrophils or eosinophils. It augments monocyte anti-tumor activity and has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis or atherosclerosis. It may be involved in the recruitment of monocytes into the arterial wall during the disease process of atherosclerosis. MCP-1 exists as a monomer or homodimer; in equilibrium. It binds to CCR2 and CCR4 and is tethered on endothelial cells by glycosaminoglycan (GAG) side chains of proteoglycans. Processing at the N-terminus can regulate receptor and target cell selectivity. Deletion of the N-terminal residue converts it from an activator of basophil to an eosinophil chemoattractant. Recombinant Human MCP-1 produced in E. coli is a non-glycosylated, polypeptide chain containing 76 amino acids and having a molecular mass of 8607 Daltons.
Synonyms:	CCL2, C-C motif chemokine 2, Monocyte Chemotactic and Activating Factor, MCAF, Small-inducible cytokine A2, SCYA2, Monocyte chemotactic protein 1, Monocyte secretory protein JE, HC11
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	CCL2
Purity/Specificity:	Purity was determined to be greater than 98% as determined by analysis by RP-HPLC and by reducing and non- reducing SDS-PAGE, against known standard.
Relevant Links:	• UniProtKB - P13500 • NCBI

Application Details

Tested Applications:	SDS-PAGE
Application Note:	MCP-1 protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-MCP-1 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Biological Activity: MCP-1 activity is determined by the ability to chemoattract human monocytes or THP-1 cells at concentrations of 4 - 15 ng/mL. Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein.

Formulation

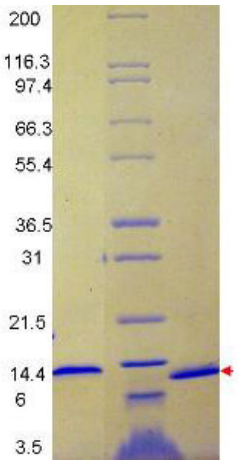
Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	20µl (20-200µl)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL) . For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiration: Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE
SDS-PAGE shows band corresponding to MCP-1 (1µg) in lane 1 (unreduced) and lane 3 (reduced, arrowhead). Molecular weight estimation was made by comparison to prestained MW markers, lane 2.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.