

Datasheet for 010-001-V74-0002**rMouse CCL2 Protein****Overview**

Description:	Mouse Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein - 010-001-V74-0002
Item No.:	010-001-V74-0002
Size:	2 µg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Mouse
Expressed in:	E. coli

Product Details

Background:	Monocyte Chemotactic Protein 1 (MCP-1), also known as CCL2, is thought to be produced by injured or infected tissues. MCP-1 signals through G protein-coupled receptors, CCR2 and CCR4, to recruit memory T cells, monocytes and dendritic cells. Recombinant mouse MCP-1 is a non-glycosylated protein, containing 125 amino acids, with a molecular weight of 13.8 kDa.
Synonyms:	JE, MCAF
Species of Origin:	Mouse
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Ccl2
Purity/Specificity:	Monocyte Chemotactic protein-1 (CCL2) purity was determined to be greater than 98% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-PAGE.
Relevant Links:	• UniProtKB - Q5SVU3

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Monocyte Chemotactic Protein-1 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Monocyte Chemotactic Protein-1 in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein. Biologic Activity: The activity is determined by its ability to chemoattract human PBMCs or THP-1 cells at 4 - 15 ng/mL.

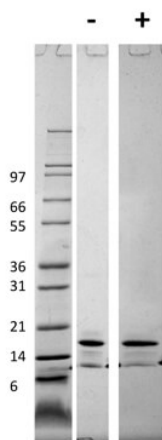
Formulation

Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	2 μ l (2-20 μ l)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

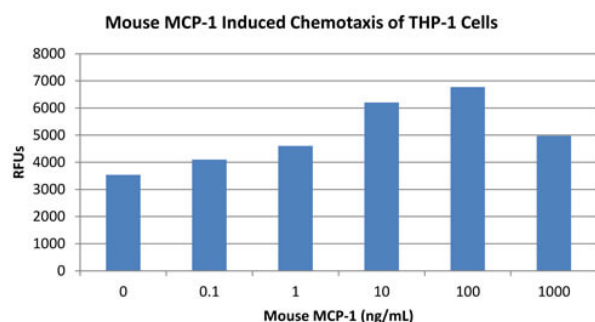
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results 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 of Mouse Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein. Lane 1: Molecular weight marker.
 Lane 2: 1 µg Mouse MCP-1 in non-reducing conditions (-).
 Lane 3: 1 µg Mouse MCP-1 in reducing conditions (+).
 Mouse MCP-1 has a predicted MW of 13.8 kDa.



SDS-PAGE

Bioactivity of Mouse Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein. Human THP-1 cells were allowed to migrate to Mouse MCP-1 at (0, 0.1, 1, 10, 100 and 1000 ng/mL). After 45 minutes, cells that migrated were counted using a luminescent substrate and displayed on the bar graph above. Significant increases in migration over basal levels were seen in response to Mouse MCP-1 starting at 1 ng/mL. This value is comparable to expected ranges of a chemotactic response of primary human monocytes.

Disclaimer

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