

Datasheet for ABIN6699615

CCL2 Protein

2 Images



Overview

Quantity:	100 μg
Target:	CCL2
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

Product Details

Purpose:	Rat Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein
Purification:	Monocyte Chemotactic protein-1 (CCL2) purity was determined to be greater than 98% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the ability to chemoattract human monocytes or THP-1 cells at 4 - 15 ng/mL.

Target Details

Target:	CCL2
Alternative Name:	Ccl2 (CCL2 Products)
Background:	Synonyms: Immediate-early serum-responsive protein JE, Monocyte chemoattractant protein 1,

Target Details

MCAF, Monocyte chemotactic protein 1 (MCP-1), Small-inducible cytokine A2
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 rat MCP-1 is a non-glycosylated protein, containing 125 amino acids, with a molecular weight of 14.1 kDa.

UniProt:

P14844

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:	Other: User Optimized
	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.
Comment:	Suggested_Applications: Cellular Assay
	Other_Performance_Data:

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: Restore with deionized water (or equivalent) Reconstitution_Volume: 100 μL
Buffer:	Buffer: 0.1 % Trifluoroacetic acid Stabilizer: None
Preservative:	Without preservative
Storage:	4 °C,-20 °C
Storage Comment:	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

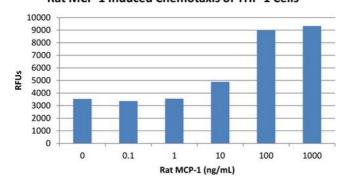
opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiry Date:

6 months

Images

Rat MCP-1 Induced Chemotaxis of THP-1 Cells



- **+**97 66 55 36 31 21 14 6

SDS-PAGE

Image 1. SDS-PAGE of Rat Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein Bioactivity of Rat Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein. Human THP-1 cells were allowed to migrate to Rat 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 Rat MCP-1 starting at 10 ng/mL. This value is comparable to expected ranges of a chemotactic response of primary human monocytes.

SDS-PAGE

Image 2. SDS-PAGE of Rat Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein SDS-PAGE of Rat Monocyte Chemotactic Protein-1 (CCL2) Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 μ g Rat MCP-1 in non-reducing conditions . Lane 3: 1 μ g Rat MCP-1 in reducing conditions (+). Rat MCP-1 has a predicted MW of 14.1 kDa.