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Datasheet for 009-001-V77-1000

rHuman CCL13 Protein

Overview

Description:	Human Monocyte Chemotactic Protein-4 (CCL13) Recombinant Protein - 009-001-V77-1000
Item No.:	009-001-V77-1000
Size:	1 mg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Human
Expressed in:	E. coli

Product Details

Background:	Monocyte Chemotactic Protein 4 (MCP-4), also called CCL13, is induced by inflammatory proteins such as IL-1 and TNFα. MCP-4 is a ligand for three different G protein coupled receptors, CCR2, CCR3 and CCR5. MCP-4 activates signaling in monocytes, T lymphocytes, eosinophils and basophils and this signaling is associated with the allergic response. Recombinant human MCP-4 is a non-glycosylated protein, containing 74 amino acids, with a molecular weight of 8.5 kDa.
Synonyms:	CK-beta-10, Monocyte chemoattractant protein 4, Monocyte chemotactic protein 4 (MCP-4), NCC-1, Small-inducible cytokine A13
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	CCL13
Purity/Specificity:	Monocyte Chemotactic protein-4 (CCL13) purity was determined to be greater than 95% as determined by HpLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - Q99616

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Monocyte Chemotactic Protein-4 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-4 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/µg protein. Biologic Activity: The biological activity is determined by the ability of MCP-4 to chemoattract human monocytes and is typically between 7–75 ng/mL.

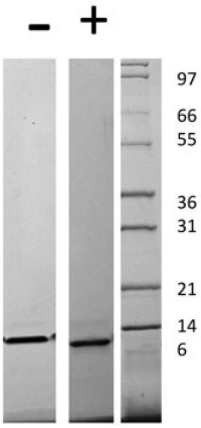
Formulation

Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

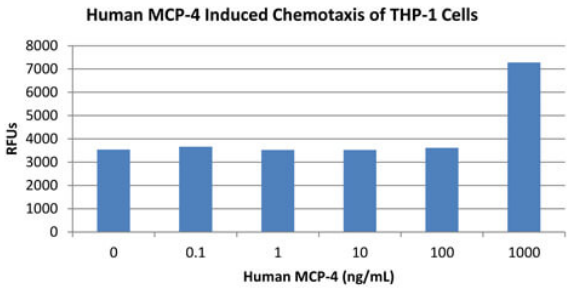
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results 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 Human Monocyte Chemotactic Protein-4 (CCL13) Recombinant Protein. Lane 1: 1 µg Human MCP-4 in non-reducing conditions (-). Lane 2: 1 µg Human MCP-4 in reducing conditions (+). Lane 3: Molecular weight marker. Human MCP-4 has a predicted MW of 8.6 kDa.



SDS-PAGE

Bioactivity of Human Monocyte Chemotactic Protein-4 (CCL13) Recombinant Protein. Human THP-1 cells were allowed to migrate to Human MCP-4 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 Human MCP-4 starting at 1000 ng/mL. This value is comparable to expected ranges of a chemotactic response of primary human monocytes.

Disclaimer

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