abcam

Product datasheet

Recombinant human MCP1 protein (Active) ab270081

5 Images

Description

Product name Recombinant human MCP1 protein (Active)

Biological activity Fully biologically active determined by the dose dependent migration of human PBMCs or THP-1

monocytes.

ED₅₀ is \leq 10-50 ng/ml, corresponding to a specific activity of 0.1-0.02 x 10⁶ units/mg.

Purity >= 95 % SDS-PAGE.

=95% by HPLC

Endotoxin level <=0.005 Eu/µg
Expression system HEK 293 cells

Accession P13500

Protein length Full length protein

Animal free Yes
Carrier free Yes

Nature Recombinant

Species Human

Sequence QPDAINAPVT CCYNFTNRKI SVQRLASYRR ITSSKCPKEA

VIFKTIVAKE ICADPKQKWV QDSMDHLDKQ TQTPKT

Predicted molecular weight 9 kDa **Actual molecular weight** 9 kDa

Molecular weight information Predicted mass is 8742.08 Da (+/- 10 Da by ESITOF). Observed mass is 8742 Da.

Amino acids 24 to 99

Additional sequence information N-terminal glycine. Full-length mature chain lacking the signal peptide.

Specifications

Our <u>Abpromise guarantee</u> covers the use of ab270081 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications Sandwich ELISA

Cell Culture SDS-PAGE

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Functional Studies

Mass Spectrometry

HPLC

Form Lyophilized

Preparation and Storage

Stability and Storage Shipped at Room Temperature. Store at Room Temperature.

Constituents: 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic

dihydrogen potassium phosphate, 10.26% Trehalose

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution Reconstitute with phosphate buffered saline. Store lyophilized form at room temperature.

Reconstitute, aliquot and store at -80°C for 12 months or +4°C for 1 week. Avoid repeated freezethaw. Lyophilized contents may appear as either a translucent film or a white power. This variance does not affect the quality of the product. Lyophilized contents may appear as either a translucent

film or a white powder. This variance does not affect the quality of the product.

General Info

Function Chemotactic factor that attracts monocytes and basophils but not neutrophils or eosinophils.

Augments monocyte anti-tumor activity. Has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis or atherosclerosis. May be involved in the recruitment of monocytes into the arterial wall during the disease process of

atherosclerosis.

Sequence similaritiesBelongs to the intercrine beta (chemokine CC) family.

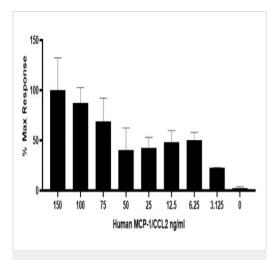
Post-translational modifications

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.

Cellular localization

Secreted.

Images



Functional Studies - Recombinant human MCP1 protein (ab270081)

Fully biologically active determined by the dose dependent migration of human PBMCs or THP-1 monocytes.

ED $_{50}$ is \leq 10-50 ng/ml, corresponding to a specific activity of 0.1-0.02 x 10^6 units/mg.

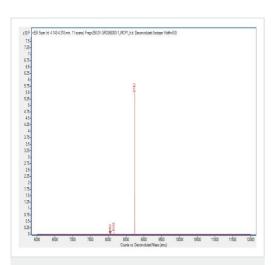
Cell based assay testing is performed on the first lot of protein only and is provided as a reference for protein activity; subsequent lots of protein must pass all biophysical quality control parameters that meet the same parameters as the first lot.

Lot: GR3368303-1



SDS-PAGE - Recombinant human MCP1 protein (ab270081)

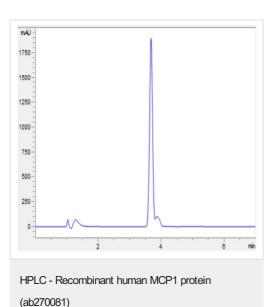
SDS-PAGE analysis of ab270081.



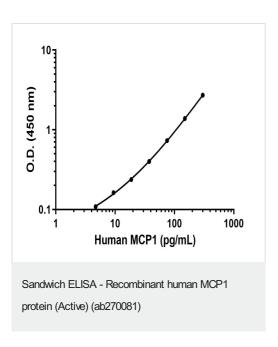
Mass Spectrometry - Recombinant human MCP1 protein (ab270081)

 ${\it Mass determination by ESITOF.}$

Predicted mass is 8742.08 Da (+/- 10 Da by ESITOF). Observed mass is 8742 Da.



HPLC analysis of ab270081.



Background subtracted standard curve using Human MCP1
Antibody Pair - BSA and Azide free (<u>ab241803</u>) and Recombinant human MCP1 protein (Active) (ab270081) in sandwich ELISA.
The ELISA was performed using the components of the corresponding SimpleStep® kit, which uses the same antibody pair with a different formulation and format.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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