

Product datasheet

Anti-MCP1 antibody [EPR21025] ab214819

Recombinant RabMAb

4 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-MCP1 antibody [EPR21025] |
| Description | Rabbit monoclonal [EPR21025] to MCP1 |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, ICC/IF, Flow Cyt, IP Unsuitable for: IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide within Human MCP1 aa 50 to the C-terminus. The exact sequence is proprietary. Database link: P13500 |
| Positive control | WB: THP-1 treated with PMA (ab120297), LPS, and BFA whole cell lysate. ICC/IF: THP-1 cells treated with PMA (ab120297), LPS, and BFA. Flow Cyt: THP-1 treated with PMA (ab120297), LPS, and BFA. IP: THP-1 treated with PMA (ab120297), LPS, and BFA whole cell lysate. |
| General notes | Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . This product is a recombinant rabbit monoclonal antibody . |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| Storage buffer | Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR21025 |
| Isotype | IgG |

Applications

Applications

Our [Abpromise guarantee](#) covers the use of **ab214819** in the following tested applications.

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

| Application | Abreviews | Notes |
|-------------|-----------|--|
| WB | | 1/1000. Detects a band of approximately 11 kDa (predicted molecular weight: 11 kDa). |
| ICC/IF | | 1/50. |
| Flow Cyt | | 1/500. |
| IP | | 1/30. |

Application notes Is unsuitable for IHC-P.

Target

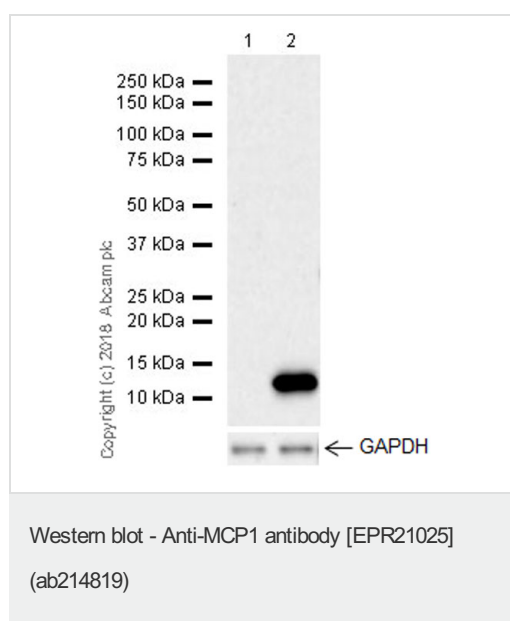
Function Chemotactic factor that attracts monocytes and basophils but not neutrophils or eosinophils. Augments monocyte anti-tumor activity. Has been implicated in the pathogenesis of diseases characterized by monocytic infiltrates, like psoriasis, rheumatoid arthritis or atherosclerosis. May be involved in the recruitment of monocytes into the arterial wall during the disease process of atherosclerosis.

Sequence similarities Belongs 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



All lanes : Anti-MCP1 antibody [EPR21025] (ab214819) at 1/1000 dilution

Lane 1 : Untreated THP-1 (human monocytic leukemia cell line) whole cell lysate

Lane 2 : THP-1 treated with 80nM Phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24 hours, then treated with 100ng/ml lipopolysaccharide (LPS) for 7 hours, then with 1 µg/ml Brefeldin A (BFA) added after 4 hours, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

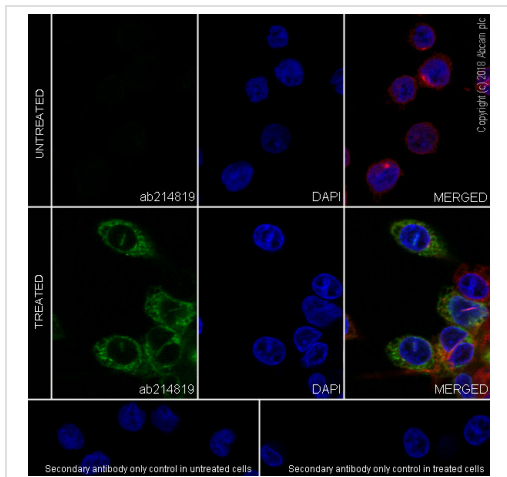
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 11 kDa

Observed band size: 11 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

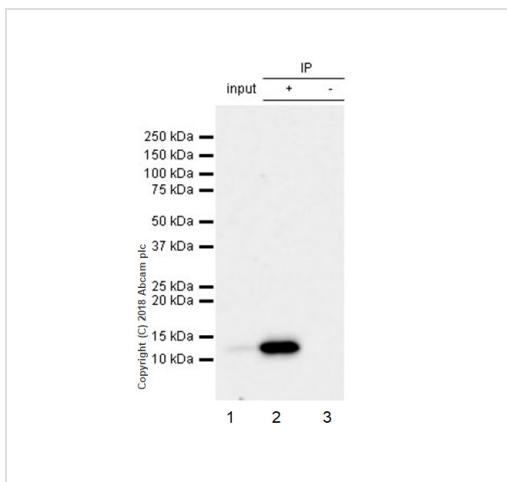


Immunocytochemistry/ Immunofluorescence - Anti-MCP1 antibody [EPR21025] (ab214819)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized THP-1 (human monocytic leukemia cell line) cells, untreated or treated with 80nM Phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24 hours, then treated with 100ng/ml lipopolysaccharide (LPS) for 7 hours, with 1 µg/ml Brefeldin A (BFA) added after 4 hours, labeling MCP1 with ab214819 at 1/50 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining in THP-1 treated cells.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) ([ab195889](#)) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/1000 dilution.



Immunoprecipitation - Anti-MCP1 antibody [EPR21025] (ab214819)

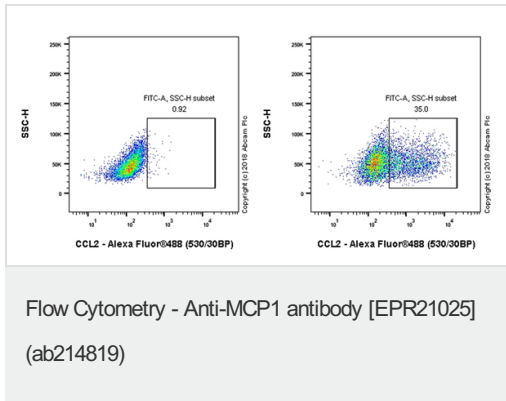
MCP1 was immunoprecipitated from 0.35 mg of THP-1 (human monocytic leukemia cell line) treated with 80nM Phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24h, then treated with 100ng/ml lipopolysaccharide (LPS) for 4h, then together with 1 µg/ml Brefeldin A (BFA) for another 3h whole cell lysate with ab214819 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab214819 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/1,000 dilution

Lane 1: THP-1 treated with 80nM Phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24h, then treated with 100ng/ml lipopolysaccharide (LPS) for 4h, then together with 1 µg/ml Brefeldin A (BFA) for another 3h whole cell lysate 10 µg (Input).

Lane 2: ab214819 IP in THP-1 treated with 80nM Phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24h, then treated with 100ng/ml lipopolysaccharide (LPS) for 4h, then together with 1 µg/ml Brefeldin A (BFA) for another 3h whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab214819 in THP-1 treated with 80nM Phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24h, then treated with 100ng/ml lipopolysaccharide (LPS) for 4h, then together with 1µg/ml Brefeldin A (BFA) for another 3h whole cell lysate.

Blocking and dilution buffer: 5% NFDN/TBST.



Flow cytometric analysis of 4% paraformaldehyde-fixed, 0.1% Tween-20-permeabilized THP-1 (human monocytic leukemia cell line) cell line, treated with 80nM Phorbol-12-myristate-13-acetate (PMA, [ab120297](#)) for 24h, then treated with 100ng/ml lipopolysaccharide (LPS) for 4h, then together with 1µg/ml Brefeldin A (BFA) for another 3h (Right) / Untreated control (Left) labeling MCP1 with [ab214891](#) at 1/500 dilution. Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) at 1/2000 dilution was used as the secondary antibody.

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