

## Product datasheet

# Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] ab259372

Recombinant RabMAb

[1 References](#) [13 Images](#)

### Overview

<b>Product name</b>	Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54]
<b>Description</b>	Rabbit monoclonal [EPR23751-54] to MIP-1 alpha/CCL3 + CCL3L1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, IP, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	<p><b>This product was produced with the following immunogens:</b></p> <p>Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.</p> <p>Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.</p>
<b>Positive control</b>	WB: THP-1 (treated with PMA / LPS(Lipopolysaccharide / Brefeldin A) whole cell lysate; RAW264.7 (treated with LPS / Brefeldin A) whole cell lysate; Recombinant human CCL3 protein; Recombinant human CCL3L1 protein. IHC-P: Human Hodgkin lymphoma tissue. ICC/IF: THP-1 and RAW264.7 cells (treated with PMA / LPS / Brefeldin A). Flow Cyt (intra): THP-1 and RAW264.7 cells (treated with PMA / LPS / Brefeldin A). IP: THP-1 (treated with PMA / LPS(Lipopolysaccharide / Brefeldin A) whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.

<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR23751-54
<b>Isotype</b>	IgG

## Applications

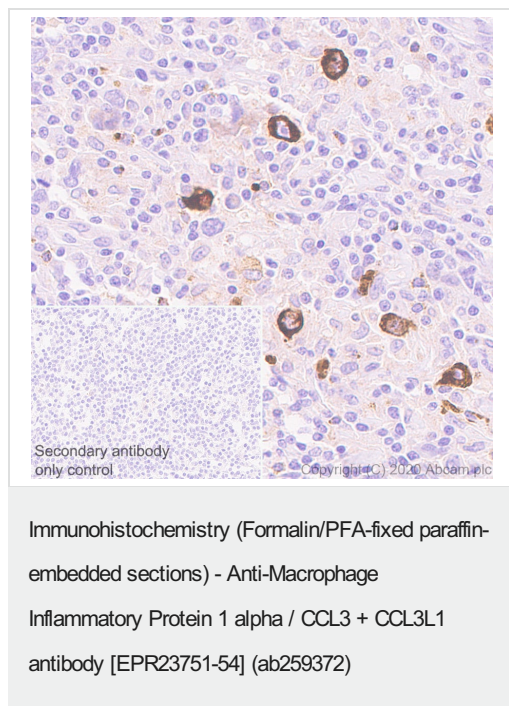
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab259372 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
WB		1/1000. Detects a band of approximately 12 kDa (predicted molecular weight: 10 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.
ICC/IF		1/50.

## Target

**Cellular localization** Macrophage Inflammatory Protein 1 alpha / CCL3: Secreted. CCL3L1: Secreted.

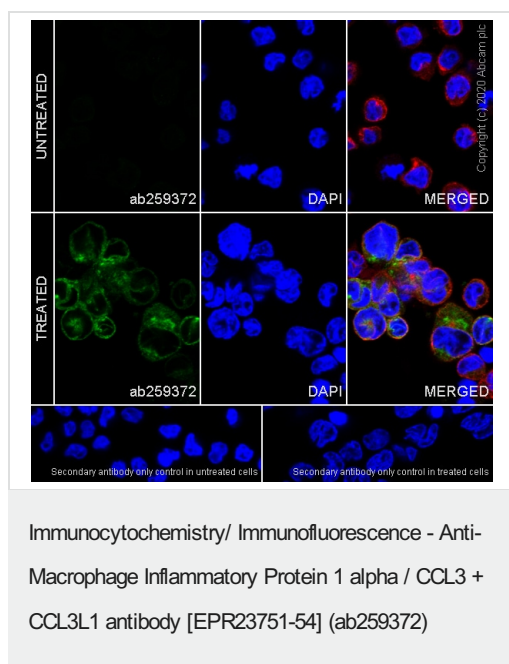
## Images



Immunohistochemical analysis of paraffin-embedded human Hodgkin lymphoma tissue labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/1000 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human hodgkin Lymphoma (PMID: 31581676). The section was incubated with ab259372 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counter stained with hematoxylin.

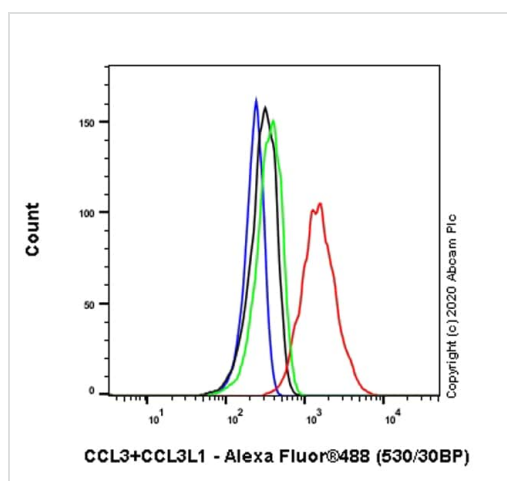
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



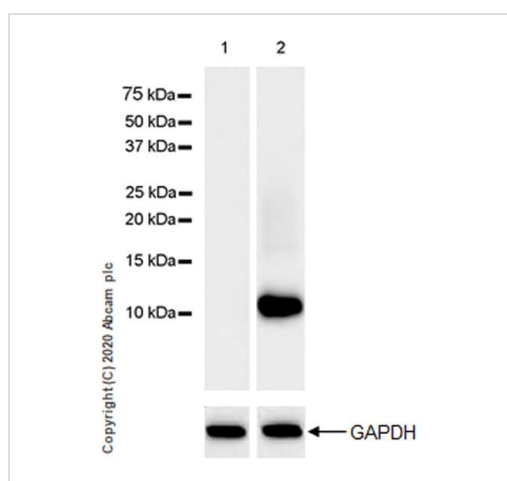
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X100 permeabilized THP-1 (human monocytic leukemia monocyte) cells labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/100 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in THP-1 cells treated with 12-myristate 13-acetate (100 nM) for 16 hours then with lipopolysaccharide (100 ng/ml) for 4 hours and with brefeldin A (1 µg/ml) for another 3 hours. Tubulin is counterstained using **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (Red). The nuclear counterstain is DAPI (Blue).

Secondary antibody only control: Used PBS instead of priary antibody, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

Intracellular flow cytometric analysis of 5% paraformaldehyde-fixed, 90% methanol-permeabilized THP-1 (Human monocytic leukemia monocyte) (treated with 100nM phorbol 12-myristate 13-acetate (PMA) for 16 hours, then 100ng/ml lipopolysaccharide (LPS) for 4 hours, and add 1ug/ml Brefeldin A (BFA) for another 3 hours) (Red)/ Untreated control (Green) cells labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/500 dilution (Red / Green) compared with a Isotype control details ([ab172730](#)) (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)), at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

**All lanes :** Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372) at 1/1000 dilution

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

**Lane 2 :** THP-1 (treated with 100nM PMA for 16 hours. And then replace PMA with 100 ng/ml LPS (Lipopolysaccharide) for 4 hours, and then 1 µg/ml Brefeldin A was added for the last 3 hours), whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

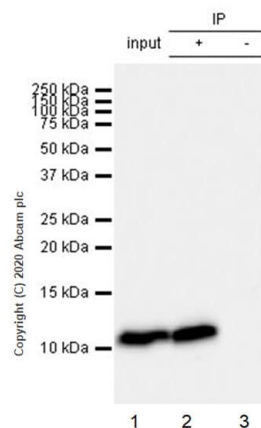
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/50000 dilution

**Predicted band size:** 10 kDa

**Observed band size:** 12 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 8 seconds.



Immunoprecipitation - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 was immunoprecipitated from 0.35 mg THP-1 (human monocytic leukemia monocyte) (treated with 100nM PMA for 16 hours. And then replace PMA with 100 ng/ml LPS (Lipopolysaccharide) for 7 hours, 1 µg/ml BFA was added for the last 3 hours) whole cell lysate with ab259372 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab259372 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) was used at 1/5000 dilution.

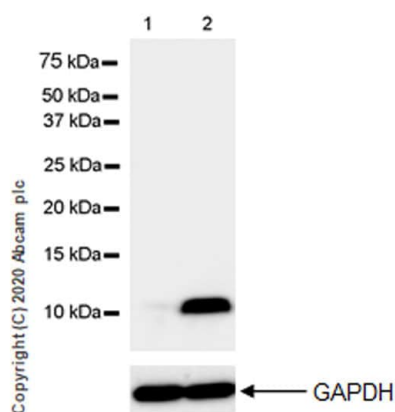
**Lane 1:** THP-1 (treated as above) whole cell lysate 3 ug

**Lane 2:** ab259372 IP in THP-1 (treated as above) whole cell lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab259372 in THP-1 (treated as above) whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 8 seconds.



Western blot - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

**All lanes :** Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372) at 1/5000 dilution

**Lane 1 :** Untreated RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

**Lane 2 :** RAW 264.7 (treated with 100 ng/ml LPS(Lipopolysaccharide) for 4 hours and then 1 µg/ml Brefeldin A was added for the last 3 hours), whole cell lysate

Lysates/proteins at 10 µg per lane.

## Secondary

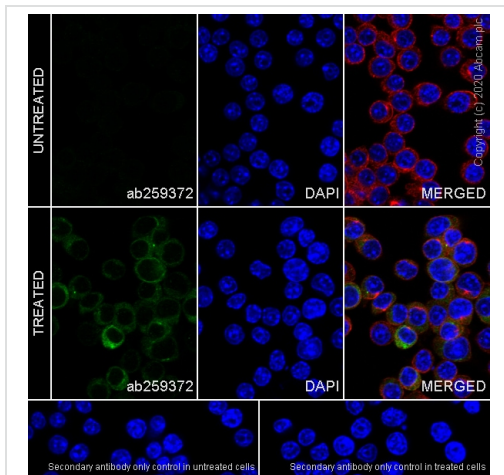
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 10 kDa

**Observed band size:** 12 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

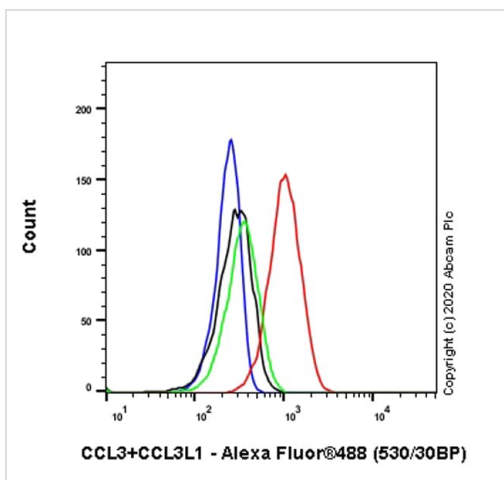
Exposure time: 3 seconds.



Immunocytochemistry/ Immunofluorescence - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X100 permeabilized RAW264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) cells labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/100 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in RAW 264.7 cells treated with 12-myristate 13-acetate (100 nM) for 16 hours then with lipopolysaccharide (100 ng/ml) for 4 hours and with brefeldin A (1 µg/ml) for another 3 hours. Tubulin is counterstained using **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (Red). The nuclear counterstain is DAPI (Blue).

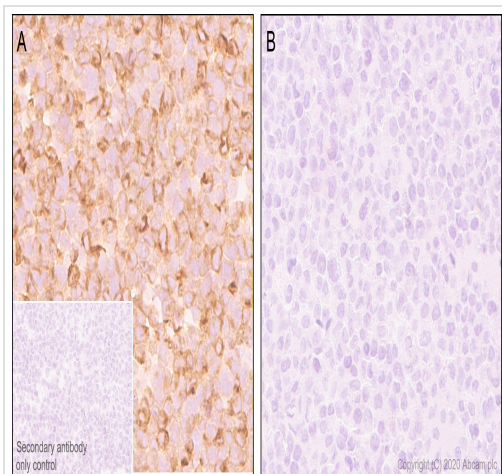
Secondary antibody only control: Used PBS instead of primary antibody, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

Intracellular flow cytometric analysis of 5% paraformaldehyde-fixed, 90% methanol-permeabilized RAW264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) (treated with 100ng/ml lipopolysaccharide (LPS) for 4 hours, and add Brefeldin A (BFA) for another 3 hours (Red)/ Untreated control (Green)) (Red)/ Untreated control (Green) cells labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/500 dilution (Red / Green) compared with a Isotype control details (**ab172730**) (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor®488, **ab150077**), at 1/2000 dilution was used as the secondary antibody.



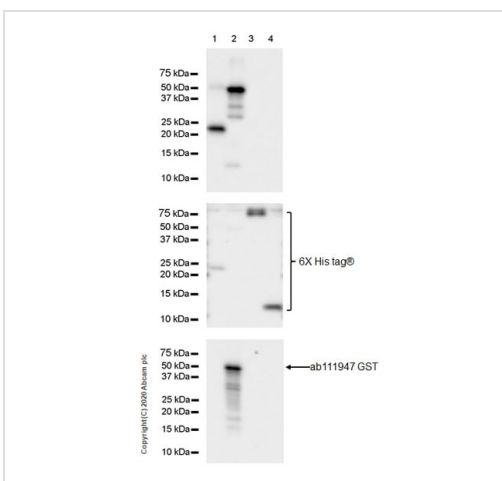


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

Immunohistochemical analysis of paraffin-embedded THP-1 cells labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/1000 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on THP-1 treated with 100nM PMA, LPS and Brefeldin treatment (image A), and negative staining on untreated THP-1 (image B). The section was incubated with ab259372 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

**All lanes :** Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372) at 1/1000 dilution

**Lane 1 :** His-tagged mouse CCL3 recombinant protein (aa24-92) \* 2, 10 ng

**Lane 2 :** GST/His-tagged human CCL3L1 recombinant protein (aa24-93), 10 ng

**Lane 3 :** LIF/His-tagged human CCL4 recombinant protein (aa24-92)\*2, 10 ng

**Lane 4 :** His-tagged human CCL18 recombinant protein (aa21-89), 10 ng

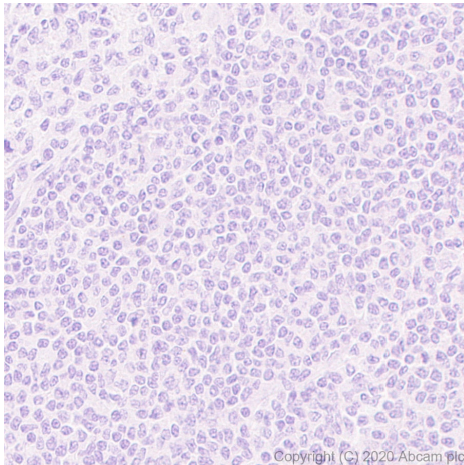
## Secondary

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/50000 dilution

**Predicted band size:** 10 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 10 seconds.

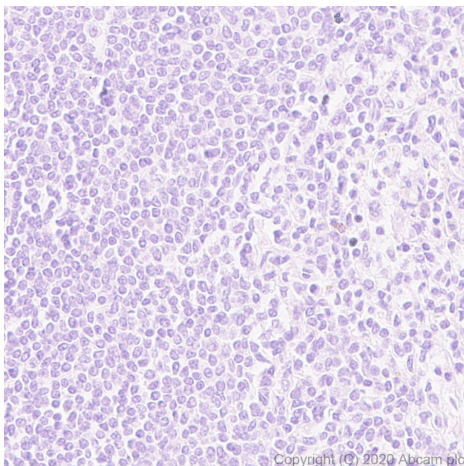


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/1000 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). **Negative control:** No staining on human tonsil. The section was incubated with ab259372 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 antibody [EPR23751-54] (ab259372)

Immunohistochemical analysis of paraffin-embedded human spleen tissue labeling Macrophage Inflammatory Protein 1 alpha / CCL3 + CCL3L1 with ab259372 at 1/1000 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). **Negative control:** No staining on human spleen tissue. The section was incubated with ab259372 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Macrophage Inflammatory Protein 1 alpha /  
CCL3 + CCL3L1 antibody [EPR23751-54]  
(ab259372)

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

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