Product Datasheet

CCL2/MCP1 Antibody
NBP1-07035

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

Reviews: 1  Publications: 8

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Updated 5/6/2020 v.20.1
# NBP1-07035

**CCL2/MCP1 Antibody**

## Product Information

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Unit Size</strong></td>
<td>0.1 ml</td>
</tr>
<tr>
<td><strong>Concentration</strong></td>
<td>1 mg/ml</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.</td>
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<tr>
<td><strong>Clonality</strong></td>
<td>Polyclonal</td>
</tr>
<tr>
<td><strong>Preservative</strong></td>
<td>0.1% Sodium Azide</td>
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<tr>
<td><strong>Isotype</strong></td>
<td>IgG</td>
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<tr>
<td><strong>Purity</strong></td>
<td>Immunogen affinity purified</td>
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<tr>
<td><strong>Buffer</strong></td>
<td>PBS and 30% Glycerol</td>
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<tr>
<td><strong>Target Molecular Weight</strong></td>
<td>16 kDa</td>
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## Product Description

- **Host**: Rabbit
- **Gene ID**: 6347
- **Gene Symbol**: CCL2
- **Species**: Human, Mouse, Rat

## Product Application Details

### Applications

- Western Blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Block/Neutralize

### Recommended Dilutions


### Application Notes

- This MCP1 antibody is useful for Immunocytochemistry/Immunofluorescence and Western blot, where a band is seen at ~16 kDa. In ICC/IP secretory vesicles staining was observed in HeLa cells. IHC-Fr and B/N applications are reported in research publications with PMIDs 22402584 and 22778093 respectively.

## Images

Western Blot: CCL2/MCP1 Antibody [NBP1-07035] - CCL2 expression level was evaluated in control group and aLAG-3 group.

![Western Blot Image](image_url)
Immunocytochemistry/Immunofluorescence: CCL2/MCP1 Antibody [NBP1-07035] - MCP1 antibody was tested in HeLa cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).

Immunohistochemistry-Paraffin: CCL2/MCP1 Antibody [NBP1-07035] - IHC analysis of a formalin-fixed paraffin-embedded (FFPE) human breast carcinoma tissue section using 1:1000 dilution of CCL2/MCP1 antibody (NBP1-07035) on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) with 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching using peroxide block. The sections were incubated with primary antibody for 30 minutes. Bond Polymer Refine Detection (Leica Biosystems) and DAB were used for signal detection which followed counterstaining with hematoxylin. Whole slide scanning and capturing of representative images (20X) were performed using Aperio AT2 (Leica Biosystems). This antibody generated a diffused cytoplasmic staining of CCL2 antigen in the cancer cells, stromal cells as well as the endothelial cells. The stroma itself showed a weak immunopositivity for CCL2. Staining was performed by Histowiz.

Western Blot: CCL2/MCP1 Antibody [NBP1-07035] - TNF alpha treated PC12 lysates.

Immunohistochemistry-Paraffin: CCL2/MCP1 Antibody [NBP1-07035] - IHC analysis of a formalin-fixed paraffin-embedded (FFPE) human breast carcinoma tissue section using 1:1000 dilution of CCL2/MCP1 antibody (NBP1-07035) on a Bond Rx autostainer (Leica Biosystems). The assay involved 20 minutes of heat induced antigen retrieval (HIER) with 10mM sodium citrate buffer (pH 6.0) and endogenous peroxidase quenching using peroxide block. The sections were incubated with primary antibody for 30 minutes. Bond Polymer Refine Detection (Leica Biosystems) and DAB were used for signal detection which followed counterstaining with hematoxylin. Whole slide scanning and capturing of representative images (20X) were performed using Aperio AT2 (Leica Biosystems). This antibody generated a diffused cytoplasmic staining of CCL2 antigen in the cancer cells, stromal cells as well as the endothelial cells. The stroma itself showed a weak immunopositivity for CCL2. Staining was performed by Histowiz.
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<td>Chen I-Chen, Lin Yu-Tsai, Huang Jhy-Shrian et al. Decreased Ambient Oxygen Tension Alters the Expression of Endothelin-1, iNOS and cGMP in Rat Alveolar Macrophages. International Journal of Medical Sciences 2019 Feb 28 [PMID: 30911278] (WB, Rat)</td>
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<tr>
<td>Lamont EA, O'Grady SM, Davis WC et al. Infection with Mycobacterium avium subsp. paratuberculosis Results in Rapid Interleukin-1 beta Release and Macrophage Transepithelial Migration Infect Immun 2012 Sep [PMID: 22778093] (B/N, Human)</td>
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Procedures

Western Blot Protocol for MCP1 Antibody (NBP1-07035)

Western Blot Protocol
1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 40 µg of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH2O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% NFDM + 1% BSA in TBS + Tween, 1 hour at RT.
6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the rabbit anti-MCP-1 primary antibody (NBP1-07035) in blocking buffer and incubate 1 hour at room temperature.
8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce ECL). Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.

Immunocytochemistry/Immunofluorescence Protocol for MCP1 Antibody (NBP1-07035)

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.
1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.
Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

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