Product Datasheet

CD11b Antibody
NB110-89474

Unit Size: 0.1 ml

Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.

Reviews: 9  Publications: 47

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB110-89474

Updated 7/28/2019 v.20.1

Earn rewards for product reviews and publications.
Submit a publication at www.novusbio.com/publications
Submit a review at www.novusbio.com/reviews/destination/NB110-89474
## Product Information

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>0.1 ml</td>
</tr>
<tr>
<td>Concentration</td>
<td>1 mg/ml</td>
</tr>
<tr>
<td>Storage</td>
<td>Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.02% Sodium Azide</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
</tr>
<tr>
<td>Purity</td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td>Buffer</td>
<td>PBS</td>
</tr>
<tr>
<td>Target Molecular Weight</td>
<td>127 kDa</td>
</tr>
</tbody>
</table>

## Product Description

**Host**
Rabbit

**Gene ID**
3684

**Gene Symbol**
ITGAM

**Species**
Human, Mouse, Rat, Bovine

**Reactivity Notes**
Sheep (88%)

**Marker**
Microglia Marker, Myeloid Marker

**Immunogen**
A synthetic peptide made to an internal region (within residues 250-350) of the mouse CD11b protein. [Swiss-Prot# P05555]

**Notes**
Alexa Fluor (R) products are provided under an intellectual property license from Life Technologies Corporation. The purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: (i) in manufacturing; (ii) to provide a service, information, or data in return for payment; (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are resold for use in research.

This conjugate is made on demand. Actual recovery may vary from the stated volume of this product. The volume will be greater than or equal to the unit size stated on the datasheet.

## Product Application Details

**Applications**
Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Single Cell Western

**Recommended Dilutions**
Western Blot 2 ug/mL, Simple Western 1:50, Flow Cytometry 1:10 - 1:1000, Immunohistochemistry 1:400, Immunocytochemistry/Immunofluorescence 1:200, Immunohistochemistry-Paraffin 1:400, Immunohistochemistry-Frozen, Single Cell Western 1:10
### Application Notes

This CD11b antibody is useful for WB analysis, ICC, Flow Cytometry (PMID 21422470) and IHC-P embedded sections. In WB a specific band is observed ~160 kDa and an apparent non-specific band is observed ~56 kDa. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. In ICC/IF, membrane staining was observed in Raw 264.7 cells. This antibody does not appear to work in human samples with WB. Use in IHC-Fr reported in scientific literature (PMID 23980916). The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

### Images


**Immunocytochemistry/Immunofluorescence:** CD11b Antibody [NB110-89474] - CD11b antibody was tested in Raw264.7 cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red).

**Simple Western:** CD11b Antibody [NB110-89474] - Specific band for Cd11b in 1.0 mg/mL of Dentate Gyrus from Rat Brain. Antibody at 1:50. This experiment was performed under reducing conditions using the 12-230 kDa separation system. Image from verified customer review.


Flow Cytometry: CD11b Antibody [NB110-89474] - A surface stain was performed on Raw264.7 cells with CD11b Antibody NB110-89474R (blue) and a matched isotype control (orange). Cells were incubated in an antibody dilution of 10 ug/mL for 20 minutes at room temperature. Both antibodies were conjugated to DyLight 550.
Immunohistochemistry-Frozen: CD11b Antibody [NB110-89474] - Blue: DAPI+ nuclei. Red: CD11b. Lung collected from an IL1b-KO monocytes-treated recipient was stained with CD11b antibody (1:100), diluted in a blocking buffer. A secondary Alexa Fluor 647-conjugated Goat anti-Rabbit antibody (1:400) was used to detect CD11b. This image was submitted via customer review.

Immunohistochemistry-Frozen: CD11b Antibody [NB110-89474] - Blue: DAPI+ nuclei Red: CD11b Human lung tissue was stained with CD11b antibody (1:100), diluted in a blocking buffer. A secondary Alexa Fluor 647-conjugated Goat anti-Rabbit antibody (1:400) was used to detect CD11b. This image was submitted via customer review.
<table>
<thead>
<tr>
<th>Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maulhardt, HA;Hylle, L;Frost, MV;Tornio, A;Dafoe, S;Drummond, L;Quinn, DI;Kamat, AM;diZerega, GS; Local Injection of Submicron Particle Docetaxel is Associated with Tumor Eradication, Reduced Systemic Toxicity and an Immunologic Response in Uro-Oncologic Xenografts Cancers (Basel) Apr 24 2019 12:00AM [PMID: 31022918] (IHC-P, Human)</td>
</tr>
<tr>
<td>Yew M, Koh R, Chye S et al. Edible birds nest improves motor behavior and protects dopaminergic neuron against oxidative and nitrosative stress in Parkinsons disease mouse model Journal of Functional Foods Sep 1 2018 12:00AM (IHC, Mouse)</td>
</tr>
<tr>
<td>Nürnberg C, Kociok N, Brockmann C et al. Dataset on the activation of Muller cells through macrophages upon hypoxia in the retina Data in Brief Nov 22 2017 [PMID: 29255783] (IHC, Mouse)</td>
</tr>
<tr>
<td>Chi ZL, Adini A, Birsner AE et al. PR1P ameliorates neurodegeneration through activation of VEGF signaling pathway and remodeling of the extracellular environment Neuropharmacology Dec 27 2018 12:00AM [PMID: 30594697] (IHC-P, Rat)</td>
</tr>
</tbody>
</table>

Procedures

Western Blot protocol specific for CD11b Antibody (NB110-89474)

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted 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 three 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.

**Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

Immunohistochemistry-Paraffin Embedded Sections (NB110-89474)

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.
Immunocytochemistry/Immunofluorescence Protocol for CD11b Antibody (NB110-89474)

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

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB110-89474

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications