Product Datasheet

CD36/SR-B3 Antibody
NB400-144

Unit Size: 0.1 ml

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

Reviews: 7  Publications: 65

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www.novusbio.com/NB400-144

Updated 2/20/2020 v.20.1
# NB400-144
## CD36/SR-B3 Antibody

### Product Information

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</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>Store at 4°C short term. Aliquot and store at -20°C long term. 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>75 kDa</td>
</tr>
</tbody>
</table>

### Product Description

- **Host**: Rabbit
- **Gene ID**: 948
- **Gene Symbol**: CD36
- **Species**: Human, Mouse, Rat, Porcine, Bovine, Primate, Rabbit
- **Reactivity Notes**: Porcine reactivity reported in scientific literature (PMID: 23727393). Rat reactivity reported in scientific literature (PMID: 25635851). Rabbit reactivity reported in scientific literature (PMID: 30105261).
- **Marker**: Endothelial Cell Marker
- **Immunogen**: A synthetic peptide mapping to a region of human CD36 between residues 100-200. [UniProt# P16671]

### Product Application Details

- **Applications**: Western Blot, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
- **Application Notes**: This CD36 antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry paraffin embedded sections, and Western blot analysis where a band is seen ~75-80 kDa. The theoretical molecular weight of CD36 is ~53 kDa. The difference in theoretical MW and actual MW as seen in Western blot is most likely due to the heavy glycosylation and palmitoylation of this protein. Use in Immunohistochemistry-Frozen reported in scientific literature (PMID: 24531551). 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.
Immunohistochemistry: CD36/SR-B3 Antibody [NB400-144] - Timp4-deficiency results in defective lipid digestion and absorption. (B) Immunostaining for CD36/SR-B3 in small intestine (proximal region) of chow-fed and HFD-fed WT and Timp4-/- mice. Western blot (C) and mRNA (D) for CD36/SR-B3 in enterocyte fraction of chow-fed and HFD-fed WT and Timp4-/- mice (collected from the proximal small intestine). Image collected and cropped by CiteAb from the following publication (http://www.nature.com/articles/s41598-017-05951-4), licensed under a CC-BY licence.

Western Blot: CD36/SR-B3 Antibody [NB400-144] - Total protein from Human Skin and Adipose tissue, Mouse Adipose and Rat Adipose tissue was separated on a 12% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/ml anti-CD36 in 5% non-fat milk in TBST and detected with an anti-rabbit HRP secondary antibody using chemiluminescence.

Western Blot: CD36/SR-B3 Antibody [NB400-144] - Detection of CD36 in human adipocyte extract (30 ug). Lane 1: 0.5 ug/ml NB 400-144; lane 2: 2 ug/ml NB 400-144. ECL: 3 second exposure.

Western Blot: CD36/SR-B3 Antibody [NB400-144] - Mouse primary muscle cell lysate. This image was submitted via customer review.

Publications

Feng WW, Wilkins O, Bang S et al. CD36-Mediated Metabolic Rewiring of Breast Cancer Cells Promotes Resistance to HER2-Targeted Therapies Cell Rep Dec 10 2019 12:00AM [PMID: 31825825]


Srisowanna N, Choijookhuu N, Yano K et al. The Effect of Estrogen on Hepatic Fat Accumulation during Early Phase of Liver Regeneration after Partial Hepatectomy in Rats Acta Histochem Cytochem 2019 Aug 30 [PMID: 31592200] (IHC-P, Rat)

Naghibosadat M Characterization of the Growth Hormone Secretagogue Receptor in Dilated Cardiomyopathy Thesis Jun 20 2019 12:00AM (IHC, Mouse)


Lin, YC;Wu, MS;Lin, YF;Chen, CR;Chen, CY;Chen, CJ;Shen, CC;Chen, KC;Peng, CC; Nifedipine Modulates Renal Lipogenesis via the AMPK-SREBP Transcriptional Pathway Int J Mol Sci Mar 29 2019 12:00AM [PMID: 30934807] (WB, Rat)

Huang, L;Chambliss, KL;Gao, X;Yuhanna, IS;Behling-Kelly, E;Bergaya, S;Ahmed, M;Michaely, P;Luby-Phelps, K;Darehshouri, A;Xu, L;Fisher, EA;Ge, WP;Mineo, C;Shaul, PW; SR-B1 drives endothelial cell LDL transcytosis via DOCK4 to promote atherosclerosis Nature Apr 24 2019 12:00AM [PMID: 31019307] (WB, Human)


More publications at http://www.novusbio.com/NB400-144
Procedures

Protocol specific for CD36 Antibody (NB400-144)

Western Blot Protocol

1. Perform SDS-PAGE (4-12%) on samples to be analyzed, loading 50ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. 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 TBST for approximately 5 minutes.
5. Block the membrane using 5% non-fat dry milk, 1% BSA in TBST for 1 hour.
6. Dilute the rabbit anti-CD36 primary antibody (NB 400-144) in blocking buffer and incubate overnight at 4 degrees Celsius.
7. Wash the membrane in TBST 5 times for 5 minutes each.
8. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
9. Wash the blot in TBST 5 times for 5 minutes each.
10. Apply the detection reagent of choice in accordance with the manufacturers instructions.

IHC-FFPE sections

I. Deparaffinization:

A. Treat slides with Xylene: 3 changes for 5 minutes each. Drain slides for 10 seconds between changes.
B. Treat slides with 100% Reagent Alcohol: 3 changes for 5 minutes each. Drain slides for 10 seconds between changes.

II. Quench Endogenous Peroxidase:

A. Place slides in peroxidase quenching solution: 15-30 minutes.

To Prepare 200 ml of Quenching Solution:
Add 3 ml of 30% Hydrogen Peroxide to 200 ml of Methanol.
Use within 4 hours of preparation

B. Place slides in distilled water: 2 changes for 2 minutes each.

III. Retrieve Epitopes:

A. Preheat Citrate Buffer. Place 200 ml of Citrate Buffer Working Solution into container, cover and place into steamer. Heat to 90-96 degrees Celcius.
B. Place rack of slides into hot Citrate Buffer for 20 minutes. Cover.
C. Carefully remove container with slides from steamer and cool on bench, uncovered, for 20 minutes.
D. Slowly add distilled water to further cool for 5 minutes.
E. Rinse slides with distilled water. 2 changes for 2 minutes each.

IV. Immunostaining Procedure:

A. Remove each slide from rack and circle tissue section with a hydrophobic barrier pen (e.g. Liquid Blocker-Super Pap Pen).
B. Flood slide with Wash Solution. Do not allow tissue sections to dry for the rest of the procedure.
C. Drain wash solution and apply 4 drops of Blocking Reagent to each slide and incubate for 15 minutes.
D. Drain Blocking Reagent (do not wash off the Blocking Reagent), apply 200 ul of Primary Antibody solution to each slide, and incubate for 1 hour.
E. Wash slides with Wash Solution: 3 changes for 5 minutes each.
F. Drain wash solution, apply 4 drops of Secondary antibody to each slide and incubate for 1 hour.
G. Wash slides with Wash Solution: 3 changes for 5 minutes each.
H. Drain wash solution, apply 4 drops of DAB Substrate to each slide and develop for 5-10 minutes. Check development with microscope.
I. Wash slides with Wash Solution: 3 changes for 5 minutes each.
J. Drain wash solution, apply 4 drops of Hematoxylin to each slide and stain for 1-3 minutes. Increase time if darker counterstaining is desired.
K. Wash slides with Wash Solution: 2-3 changes for 2 minutes each.
L. Drain wash solution and apply 4 drops of Bluing Solution to each slide for 1-2 minutes.
M. Rinse slides in distilled water.
N. Soak slides in 70% reagent alcohol: 3 minutes with intermittent agitation.
O. Soak slides in 95% reagent alcohol: 2 changes for 3 minutes each with intermittent agitation.
P. Soak slides in 100% reagent alcohol: 3 changes for 3 minutes each with intermittent agitation. Drain slides for 10 seconds between each change.
Q. Soak slides in Xylene: 3 changes for 3 minutes each with intermittent agitation. Drain slides for 10 seconds between each change.
R. Apply 2-3 drops of non-aqueous mounting media to each slide and mount coverslip.
S. Lay slides on a flat surface to dry prior to viewing under microscope.

NOTES:
- Use treated slides (e.g. HistoBond) to assure adherence of FFPE sections to slide.
- Prior to deparaffinization, heat slides overnight in a 60 degrees Celsius oven.
- All steps in which Xylene is used should be performed in a fume hood.
- For Epitope Retrieval, a microwave or pressure cooker may be substituted for the steamer method. Adjust times as necessary depending on conditions.
- For the initial IHC run with a new primary antibody, test tissues with and without Epitope Retrieval. In some instances, Epitope Retrieval may not be necessary.
- 200 ul is the recommended maximum volume to apply to a slide for full coverage. Using more than 200 ul may allow solutions to wick off the slide and create drying artifacts. For small tissue sections less than 200 ul may be used.
- 5 minutes of development with DAB Substrate should be sufficient. Do not develop for more than 10 minutes. If 5 minutes of development causes background staining, further dilution of the primary antibody may be necessary.
- Hematoxylin should produce a light nuclear counterstain so as not to obscure the DAB staining. Counterstain for 1-1/2 minutes for nuclear antigens. Counterstain for 2-3 minutes for cytoplasmic and membranous antigens. If darker counterstaining is desired increase time (up to 10 minutes).
**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.

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