Product Datasheet

OXPAT Antibody - BSA Free

NB110-60509

Unit Size: 0.1 ml

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

Publications: 15

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Updated 10/4/2022 v.20.1

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# NB110-60509  
OXPAT Antibody - BSA Free

## Product Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>0.1 ml</td>
</tr>
<tr>
<td>Concentration</td>
<td>1.0 mg/ml</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.1% 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 and 30% Glycerol</td>
</tr>
<tr>
<td>Target Molecular Weight</td>
<td>50 kDa</td>
</tr>
</tbody>
</table>

## Product Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Gene ID</td>
<td>440503</td>
</tr>
<tr>
<td>Gene Symbol</td>
<td>PLIN5</td>
</tr>
<tr>
<td>Species</td>
<td>Human, Mouse, Porcine, Bovine</td>
</tr>
<tr>
<td>Reactivity Notes</td>
<td>porcine reactivity reported in scientific literature (PMID: 29094660). Human, bovine and mouse. Immunogen displays the following percentage of sequence identity for non-tested species: sheep (94%), porcine (94%), rat (84%).</td>
</tr>
<tr>
<td>Immunogen</td>
<td>A synthetic peptide made to a region of the human OXPAT protein, within residues 300-400. [UniProt# Q00G26]</td>
</tr>
</tbody>
</table>

## Product Application Details

### Applications

- Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin

### Recommended Dilutions

- Western Blot 0.5-2.0 ug/ml, Simple Western 10 ug/ml, Immunohistochemistry 1.0-5.0 ug/ml, Immunocytochemistry/Immunofluorescence, Immunohistochemistry-Paraffin 1.0-5.0 ug/ml, Immunohistochemistry-Frozen

### Application Notes

This OXPAT antibody is useful for Western blot and Immunohistochemistry on paraffin-embedded sections. In WB a band can be seen at approx. 50 kDa, representing the OXPAT protein. Use in Immunohistochemistry-Frozen reported in scientific literature (PMID 24648545). Use in Immunocytochemistry/Immunofluorescence reported in scientific literature (PMID: 26096040).

In Simple Western only 10 - 15 μL of the recommended dilution is used per data point. Separated by Size-Wes, Sally Sue/Peggy Sue. 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.
Western Blot: OXPAT Antibody [NB110-60509] - Detection of OXPAT in human (lane 1) and mouse (lane 2) heart lysate.


Simple Western: OXPAT Antibody [NB110-60509] - Simple Western lane view shows a specific band for OXPAT in 0.5 mg/ml of Human Heart (left) and Mouse Heart (right) lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.
### Publications


**Details:**
Dilution used in WB 1:500


Dahl N Development of skeletal muscle and adipose tissues in neonatal dairy calves upon a maternal supplementation with essential fatty acids and conjugated linoleic acids Thesis 2022-01-01

Fillmore N, Hou V, Sun J et al. Cardiac specific knock-down of peroxisome proliferator activated receptor alpha prevents fasting-induced cardiac lipid accumulation and reduces perilipin 2 PloS one 2022-03-08 [PMID: 35259201] (WB, Mouse)


**Details:**
Citation using the PE/Cy7 format of this antibody.

Pantha R, Lee J, Bae J et al. LRH-1 Ameliorates Hepatic Triglyceride Accumulation via Regulation of Perilipin 5 in the Liver Preprints 2021-02-12 (ICC/IF, Mouse)


Zhong W, Fan B, Cong H et al. Oleic acid-induced perilipin 5 expression and lipid droplets formation are regulated by the PI3K/PPAR alpha pathway in HepG2 cells Appl Physiol Nutr Metab 2019-08-01 [PMID: 31274012]

Kristensen MD, Petersen SM, Moller KE et al. Obesity leads to impairments in the morphology and organization of human skeletal muscle lipid droplets and mitochondrial networks, which are resolved with gastric bypass surgery-induced improvements in insulin sensitivity Acta Physiol (Oxf) 2018-05-23 [PMID: 29791782] (Human)

Lambertz J, Berger T, Mak TW et al. Lipocalin-2 in Fructose-Induced Fatty Liver Disease. Front Physiol 2017-11-28 [PMID: 29234288] (Mouse)

Zappaterra M, Mazzoni M, Zambonelli P, Davoli R. Investigation of the Perilipin 5 gene expression and association study of its sequence polymorphism with meat and carcass quality traits in different pig breeds animal. 2017-11-02 [PMID: 29094660] (Porcine)

Procedures

Western Blot protocol for OXPAT Antibody (NB110-60509)

Western Blot Protocol

1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 40 ug 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% non-fat dry milk + 1% BSA in TBS, overnight at 4C.
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-OXPAT primary antibody (NB 110-60509) 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.
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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