Product Datasheet

Beclin 1 Antibody
NB110-87318

Unit Size: 0.05 ml

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

Reviews: 4  Publications: 39

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB110-87318

Updated 5/6/2020 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/NB110-87318
**NB110-87318**  
**Beclin 1 Antibody**

### Product Information

<table>
<thead>
<tr>
<th><strong>Unit Size</strong></th>
<th>0.05 ml</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td>1 mg/ml</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Polyclonal</td>
</tr>
<tr>
<td><strong>Preservative</strong></td>
<td>0.02% Sodium Azide</td>
</tr>
<tr>
<td><strong>Isotype</strong></td>
<td>IgG</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td><strong>Buffer</strong></td>
<td>PBS, 0.02 Sodium Azide</td>
</tr>
<tr>
<td><strong>Target Molecular Weight</strong></td>
<td>51 kDa</td>
</tr>
</tbody>
</table>

### Product Description

**Host**  
Rabbit

**Gene ID**  
8678

**Gene Symbol**  
BECN1

**Species**  
Human, Mouse, Porcine, Canine, Primate

**Reactivity Notes**  
Canine reactivity reported in scientific literature (PMID: 24027311).

### Product Application Details

**Applications**  
Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Knockdown Validated

**Recommended Dilutions**  
Western Blot 1:1000, Simple Western 1:12.5, Immunohistochemistry 1:50 - 1:400, Immunocytochemistry/Immunofluorescence 1:50, Immunohistochemistry-Paraffin 1:50 - 1:400, Knockdown Validated

**Application Notes**  
In Western blot, a band is seen approx. 51 kDa. In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. Knockdown validation (PMID: 29297744).

### Images

Simple Western: Beclin 1 Antibody [NB110-87318] - Lane view shows a specific band for Beclin in 1.0 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.
Western Blot: Beclin 1 Antibody [NB110-87318] - Total protein from human HeLa and mouse Neuro2A cells 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-Beclin-1 in blocking buffer and detected with an anti-rabbit HRP secondary antibody using chemiluminescence.

Immunohistochemistry-Paraffin: Beclin 1 Antibody [NB110-87318] - Analysis of a FFPE tissue section of human breast cancer using Beclin 1 antibody (Lot 71917) at 1:300 dilution. The primary antibody bound to Beclin 1 antigen in the tissue section was detected using a HRP labeled secondary antibody and DAB reagent. Nuclei of the cells were counterstained with hematoxylin. Cytoplasmic staining can be seen in the cancer as well as the stromal cells. The signal was strongest in a subset of stromal cells which appears to be the cancer associated fibroblasts.

Western Blot: Beclin 1 Antibody [NB110-87318] - Basal levels of autophagy in the hypothalamus of BACHD mice. The expression levels of selected autophagy markers were analyzed by Western blot in hypothalamic tissue from BACHD mice at 2, 6 and 12 months of age and compared with gender- and age-matched controls (n=3-6/group). The data showed a substantial maintenance of the autophagy flux, despite the presence of a metabolic phenotype in the BACHD mice already at early time points. The data in the graphs are expressed as mean +/- SEM, relative to the 2 months wt controls. The Western blots are representative of one sample for each group. Image collected and cropped by CiteAb from the following publication (/dx.plos.org/10.1371/journal.pone.0083050), licensed under a CC-BY licence.

Immunocytochemistry/Immunofluorescence: Beclin 1 Antibody [NB110-87318] - Beclin 1/ATG6 Antibody [NB110-87318] - Beclin1 antibody was tested in HeLa cells with FITC (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).
Immunohistochemistry-Paraffin: Beclin 1 Antibody [NB110-87318] - Analysis of a FFPE tissue section of human breast cancer using Beclin 1 antibody (Lot F4) at 1:300 dilution. The primary antibody bound to Beclin 1 antigen in the tissue section was detected using a HRP labeled secondary antibody and DAB reagent. Nuclei of the cells were counterstained with hematoxylin. Cytoplasmic staining can be seen in the cancer as well as the stromal cells. The signal was strongest in a subset of stromal cells which appears to be the cancer associated fibroblasts.

Western Blot: Beclin 1 Antibody [NB110-87318] - Image from verified customer review.

Immunohistochemistry: Beclin 1/ATG6 Antibody [NB110-87318] - Staining of normal breast tissue.
<table>
<thead>
<tr>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuchel J, Ghatak S, Zuk AV et al. TGFB1 is secreted through an unconventional pathway dependent on the autophagic machinery and cytoskeletal regulators Autophagy. 2018 Mar 10 [PMID: 29297744] (WB, KD, Mouse)</td>
</tr>
<tr>
<td>Visa A, Sallan MC, Maiques O et al. T-type Cav3. 1 channels mediate progression and chemotherapeutic resistance in glioblastoma Cancer research Jul 11 1905 12:00AM [PMID: 30755443] (WB, Human)</td>
</tr>
<tr>
<td>Rawat P, Teodorof-Diedrich C, Spector SA. Human immunodeficiency virus Type-1 single-stranded RNA activates the NLRP3 inflammasome and impairs autophagic clearance of damaged mitochondria in human microglia Glia Dec 24 2018 12:00AM [PMID: 30582668] (Human)</td>
</tr>
<tr>
<td>Fink SL, Jayewickreme TR, Molony RD et al. IRE1a promotes viral infection by conferring resistance to apoptosis. Sci Signal 2017 Jun 06 [PMID: 28588082] (Human)</td>
</tr>
</tbody>
</table>

**Procedures**

**Western Blot Protocol for Beclin 1 Antibody (NB110-87318)**

**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% 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-Beclin1 primary antibody (NB 110-87318) 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](http://www.novusbio.com/guarantee)

Earn gift cards/discounts by submitting a review: [www.novusbio.com/reviews/submit/NB110-87318](http://www.novusbio.com/reviews/submit/NB110-87318)

Earn gift cards/discounts by submitting a publication using this product: [www.novusbio.com/publications](http://www.novusbio.com/publications)