Product Datasheet

Beclin 1 Antibody - BSA Free
NB110-87318SS

Unit Size: 0.025 ml

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

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Reviews: 4 Publications: 69

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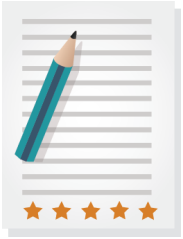
Updated 9/9/2025 v.20.1



NB110-87318SS

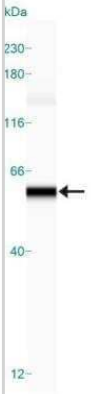
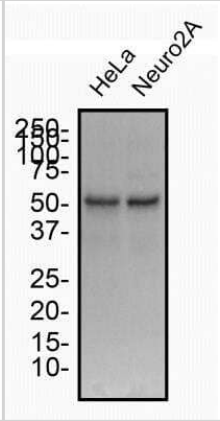
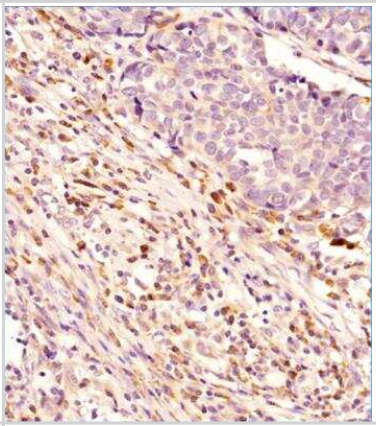
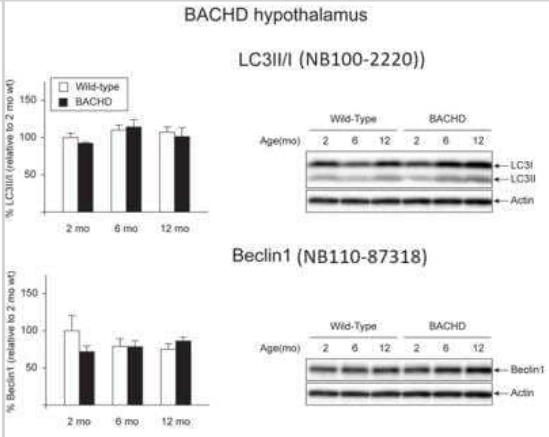
Beclin 1 Antibody - BSA Free

Product Information	
Unit Size	0.025 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	51 kDa

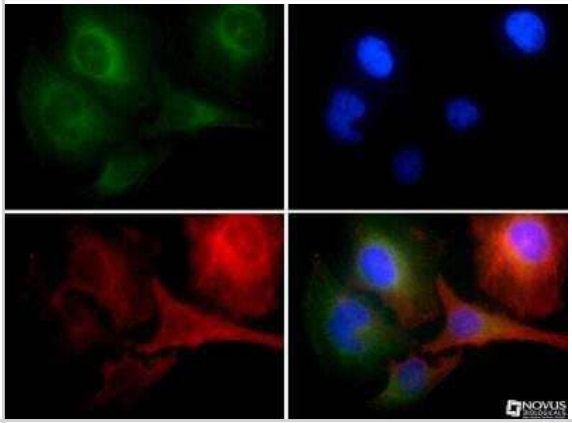
Product Description	
Description	Novus Biologicals Rabbit Beclin 1 Antibody - BSA Free (NB110-87318) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-Beclin 1 Antibody: Cited in 66 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	8678
Gene Symbol	BECN1
Species	Human, Mouse, Rat, Porcine, Alligator, Canine, Primate
Reactivity Notes	Use in Rat reported in scientific literature (PMID:34622072). Canine reactivity reported in scientific literature (PMID: 24027311). Use in Rat reported in scientific literature (PMID:32501746).
Immunogen	Synthetic peptide made to an internal portion of human Beclin 1 (within residues 150-300). [Swiss-Prot: Q14457]

Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, 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 reported in scientific literature (PMID 29297744)
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. See Simple Western Antibody Database for Simple Western validation: Tested in HeLa lysate 1.0 mg/mL, separated by Size, antibody dilution of 1:12.5, apparent MW was 59 kDa

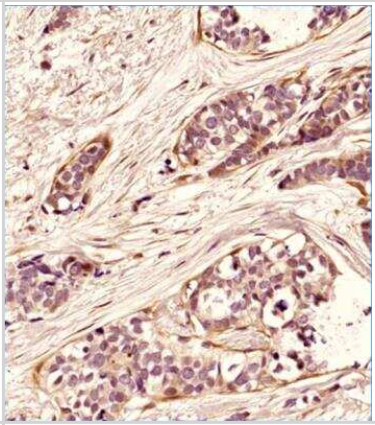
Images

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 license.	

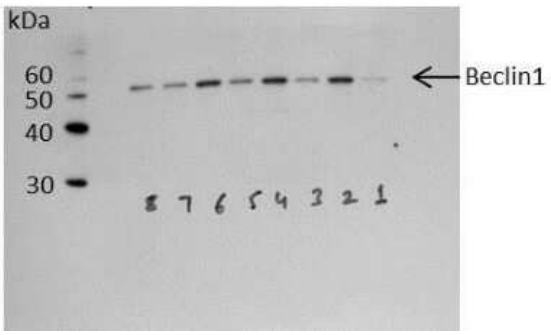
Immunocytochemistry/Immunofluorescence: Beclin 1 Antibody [NB110-87318] - Beclin 1/ATG6 Antibody [NB110-87318] - Beclin1 antibody was tested in HeLa cells with FITC (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).



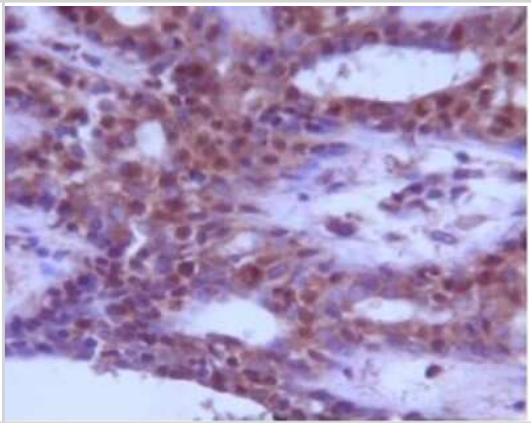
Immunohistochemistry-Paraffin: Beclin 1 Antibody [NB110-87318] - Analysis of a FFPE tissue section of human breast cancer using Beclin 1 antibody (Lot F4) at 1:300 dilution. The primary antibody bound to Beclin 1 antigen in the tissue section was detected using a HRP labeled secondary antibody and DAB 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.



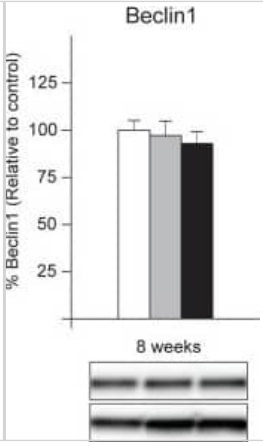
Western Blot: Beclin 1 Antibody [NB110-87318] - Image from verified customer review.



Immunohistochemistry: Beclin 1/ATG6 Antibody [NB110-87318] - Staining of normal breast tissue.



Western Blot: Beclin 1 Antibody - BSA Free [NB110-87318] - Maintenance of basal levels of autophagy in mice overexpressing htt fragments in the hypothalamus.The expression levels of selected autophagy markers were analyzed by Western blot in mice bilaterally injected with rAAV5-htt853-18Q or rAAV5-htt853-79Q & compared to uninjected controls 8 weeks post injection (n=6–7/group). The data displayed maintenance of the autophagy flux, despite the presence of a clear metabolic phenotype in the injected mice. The data in the graphs are expressed as mean ± SEM relative to the uninjected controls. The Western blots are representative of one sample for each group. Image collected & cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0083050), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Lee Y, Kim Y, Park S et al. Fexuprazan mitigates NSAID-induced small intestinal injury by restoring intestinal barrier integrity in mice. Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie 2025-08-26 [PMID: 40753937]

Shi H, Yang Y, Gao J et al. Kit-mediated autophagy suppression driven by a viral oncoprotein emerges as a crucial survival mechanism in Merkel cell carcinoma. Autophagy 2025-03-19 [PMID: 40108758]

Xu R, Wang J, Wang M et al. Exosomes Derived from Yak Follicular Fluid Increase 2-Hydroxyestradiol Secretion by Activating Autophagy in Cumulus Cells Animals (Basel) 2022-11-16 [PMID: 36428401]

Kneppers AEM, Langen RCJ, Gosker HR et al. Increased Myogenic and Protein Turnover Signaling in Skeletal Muscle of Chronic Obstructive Pulmonary Disease Patients With Sarcopenia Journal of the American Medical Directors Association 2017-07-01 [PMID: 28578881]

Jeong G, Shin S, Kim S et al. Ginsenoside Re prevents 3-methyladenine-induced catagen phase acceleration by regulating Wnt/?-catenin signaling in human dermal papilla cells Journal of Ginseng Research 2022-11-01 [PMID: 37252273]

Gatz C, Hathazi D, M□nchberg U et al. Identification of Cellular Pathogenicity Markers for SIL1 Mutations Linked to Marinesco-Sj□gren Syndrome Frontiers in Neurology 2019-06-14 [PMID: 31258504]

Fei M, Zhang L, Wang H et al. Inhibition of Cathepsin S Induces Mitochondrial Apoptosis in Glioblastoma Cell Lines Through Mitochondrial Stress and Autophagosome Accumulation Frontiers in Oncology 2020-12-23 [PMID: 33425712]

Mattiolo P, Yuste VJ, Boix J, Ribas J. Autophagy exacerbates caspase-dependent apoptotic cell death after short times of starvation Biochemical Pharmacology 2015-12-15 [PMID: 26441250]

Bi Y, Yang G, Guo Z et al. Chronic high?salt intake induces cardiomyocyte autophagic vacuolization during left ventricular maladaptive remodeling in spontaneously hypertensive rats Experimental and Therapeutic Medicine 2023-02-16 [PMID: 36911373]

Challa TD, Wueest S, Lucchini FC et al. Liver ASK1 protects from non-alcoholic fatty liver disease and fibrosis EMBO Molecular Medicine 2019-10-01 [PMID: 31595673]

Saddouk, FZ;Kuzemczak, AP;Saito, J;Greif, DM; Endothelial HIF?-PDGF-B to smooth muscle Beclin1 signaling sustains pathological muscularization in pulmonary hypertension JCI insight 2024-04-23 [PMID: 38652543]

Lin Y, Cheng W, Chang J et Al. Astragaloside IV reduces mutant Ataxin-3 levels and supports mitochondrial function in Spinocerebellar Ataxia Type 3 Sci Rep 2024-10-29 [PMID: 39472629]

More publications at http://www.novusbio.com/NB110-87318

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.

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