

# Product Datasheet

## Beclin 1/ATG6 Antibody 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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Updated 6/15/2014 v.20.1

**NB110-87318SS**

Beclin 1/ATG6 Antibody

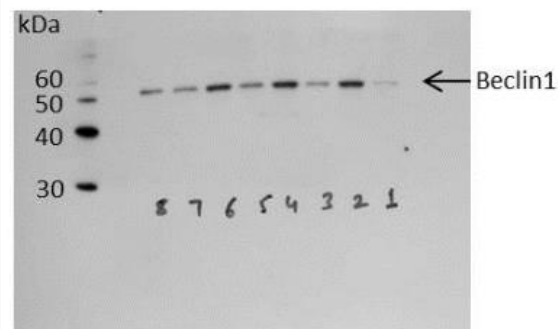
Product Information	
Unit Size	0.025 ml
Concentration	0.2 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Purity	Immunogen affinity purified
Buffer	PBS, 0.1% BSA, 50% glycerol
Target Molecular Weight	51 kDa

Product Description	
Host	Rabbit
Gene ID	8678
Gene Symbol	BECN1
Species	Human, Mouse, Canine, Primate, Porcine
Species Reactivity	Human, mouse, rat (96%), monkey, bovine (97%), porcine. Canine reactivity reported in scientific literature (PMID: 24027311). Possible reactivity to Chicken (87%), <i>Xenopus laevis</i> (79%), and <i>Xenopus tropicalis</i> (77%) (not yet validated).
Immunogen	Synthetic peptide made to an internal portion of human Beclin 1 (within residues 150-300). [Swiss-Prot# Q14457]

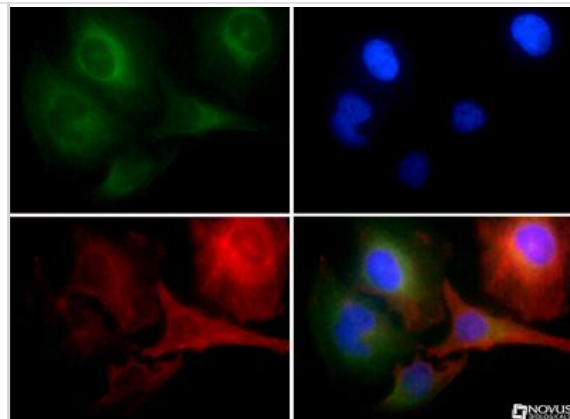
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Immunocytochemistry/Immunofluorescence 1:50, Immunohistochemistry 1:400, Immunohistochemistry-Paraffin 1:400, Western Blot 1:10000, Immunoprecipitation, Simple Western 1:12.5
Application Notes	This Beclin 1 antibody is useful for Immunohistochemistry paraffin sections, Immunocytochemistry/Immunofluorescence, and Western blot where a band is seen ~51 kDa. Immunoprecipitation was reported in scientific literature. In Simple Western only 10-15 uL of the recommended dilution is used per data point.

**Images**

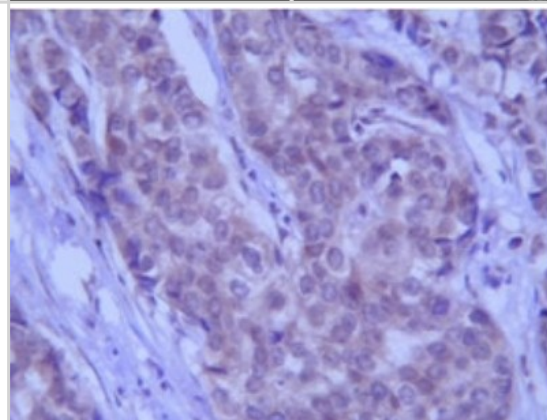
Western Blot: Beclin 1 Antibody [NB110-87318] - Beclin 1 antibody image from verified customer review.



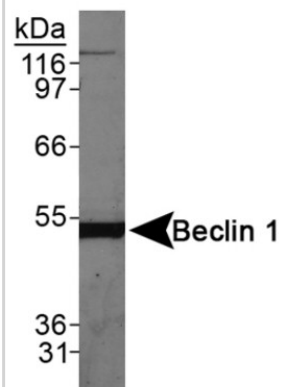
Immunocytochemistry/Immunofluorescence: Beclin 1 Antibody [NB110-87318] - Beclin1 antibody was tested in HeLa cells with FITC (green). Nuclei and alpha-tubulin were counterstained with Dapi (blue) and Dylight 550 (red).



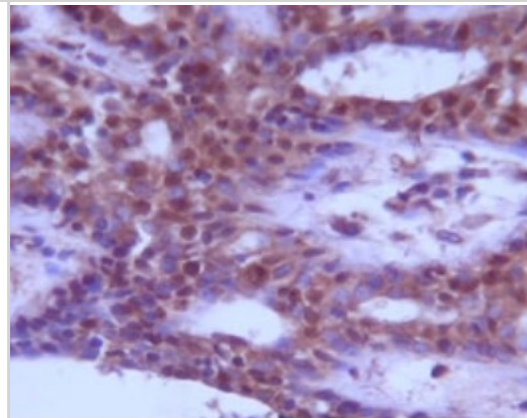
Immunohistochemistry: Beclin 1 Antibody [NB110-87318] - Staining of breast carcinoma.



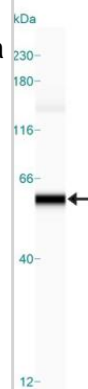
Western Blot: Beclin 1 Antibody [NB110-87318] - Detection of Beclin 1 in HeLa whole cell lysate at 1:10,000.



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



Simple Western: Beclin 1/ATG6 Antibody [NB110-87318] - Simple Western 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.



## Publications

Baldo B, Soylu R, Petersen A et al. Maintenance of Basal Levels of Autophagy in Huntington's Disease Mouse Models Displaying Metabolic Dysfunction. *PLoS One* 2013 Dec 20 [PMID: 24376631] (WB, Mouse)

Romao S, Gasser N, Becker AC et al. Autophagy proteins stabilize pathogen-containing phagosomes for prolonged MHC II antigen processing. *J Cell Biol* 2013 Dec 9 [PMID: 24322427] (ICC/IF, Human)

Huang Y, Hou JK, Chen TT et al. PML-RAR alpha enhances constitutive autophagic activity through inhibiting the Akt/mTOR pathway. *Autophagy*. 2011 Oct [PMID: 21673516] (WB, Human)

Zhirnov OP, Klenk HD. Influenza A virus proteins NS1 and HA along with M2 are involved in stimulation of autophagy in infected cells. *J Virol*. 2013 Sep 11 [PMID: 24027311] (WB, Canine, Primate, Human)

Sala-Mercado JA, Wider J, Undyala VV et al. Profound cardioprotection with chloramphenicol succinate in the swine model of myocardial ischemia-reperfusion injury. *Circulation* 2010 Sep 14 [PMID: 20837911] (WB, Porcine)

Polotskaia A, Hoffman S, Krett NL et al. 8-Amino-Adenosine Activates p53-Independent Cell Death of Metastatic Breast Cancers *Mol Cancer Ther* 2012 Nov [PMID: 22973058] (WB, Human)

Neely K, Green K, LaFerla F. Presenilin is necessary for efficient proteolysis through the autophagy-lysosome system in a secretase-independent manner *J Neurosci* 2011 Feb 23 [PMID: 21414900] (WB, Mouse)

Kyei GB, Dinkins C, Davis AS et al. Autophagy pathway intersects with HIV-1 biosynthesis regulates viral yields in macrophages. *J Cell Biol*;186(2):255-268. 2009 [PMID: 19635843]

Hoang B, Benavides A, Shi Y et al. Effect of autophagy on multiple myeloma cell viability. *Mol Cancer Ther*;8(7):1974-1984. 2009 [PMID: 19509276]

Bellot G, Garcia-Medina R, Gounon P et al. Hypoxia-Induced Autophagy Is Mediated through Hypoxia-Inducible Factor Induction of BNIP3 BNIP3L via Their BH3 Domains. *Mol Cell Biol*;29(10):2570-2581. 2009 [PMID: 19273585]

Pattingre S, Bauvy C, Carpentier S et al. Role of JNK1-dependent Bcl-2 phosphorylation in ceramide-induced macroautophagy. *J Biol Chem*;284(5):2719-28. 2009 Jan 30. [PMID: 19029119] (WB, IP, Human)

## Procedures

### Protocol specific 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 dH<sub>2</sub>O 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 dH<sub>2</sub>O 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 dH<sub>2</sub>O 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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### **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 guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee).**

