

Datasheet for 600-401-Z53**BECLIN1 Antibody****Overview**

Description:	Anti-Beclin1 (RABBIT) Antibody - 600-401-Z53
Item No.:	600-401-Z53
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells. Beclin-1, a coiled-coil Bcl-2-interacting protein homologous to the yeast autophagy gene <i>apg6</i> , is a mammalian autophagy gene that can inhibit tumorigenesis and is expressed at reduced levels in human breast carcinoma, suggesting that defects in autophagy proteins may contribute to the development or progression of tumors. Bcl-2 can bind to Beclin-1 and inhibit Beclin-1-dependent autophagy in yeast and mammalian cells, suggesting that Bcl-2 functions as an anti-autophagy protein as well as an anti-apoptotic protein, which helps maintain autophagy at levels that are more compatible with cell survival rather than cell death.
Synonyms:	Beclin-1 Antibody, ATG6, VPS30, beclin1, GT197, Beclin-1, Coiled-coil myosin-like BCL2-interacting protein
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	BECN1
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Beclin-1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 16 amino acid synthetic peptide from near the C-terminus of human Beclin-1.
Purity/Specificity:	Anti-Beclin-1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with Beclin-1 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q14457 • GeneID - 8678 • NCBI - AAH10276

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-Beclin-1 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 52 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:20,000
IF:	2 µg/mL
WB:	0.5 - 2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

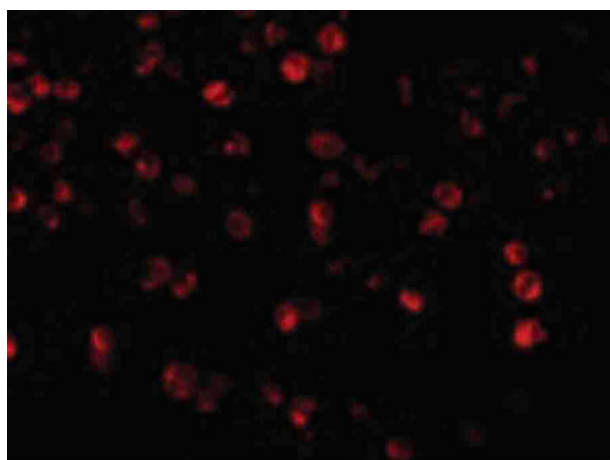
Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

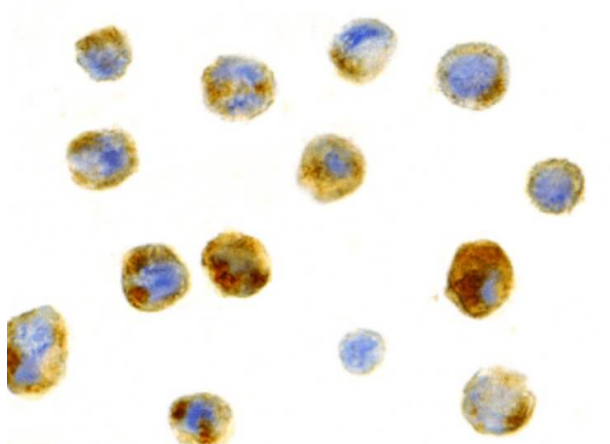
Expiration: Expiration date is one (1) year from date of receipt.

Images



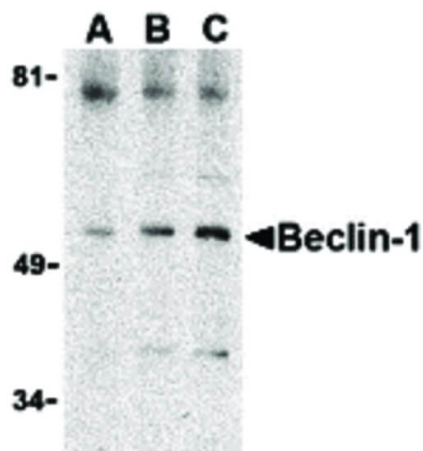
Immunofluorescence Microscopy

Immunofluorescence Microscopy of Beclin-1 antibody. Cell Type: A431 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Beclin-1 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Beclin-1 is located in the cytoplasm, endoplasmic reticulum, endosome, golgi apparatus, cell membrane, and mitochondrion. Staining: Beclin-1 as red fluorescent signal.



Immunohistochemistry

Immunocytochemistry of Beclin-1 antibody. Cell Type: A431 cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Beclin-1 antibody at 1 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Beclin-1 is located in the cytoplasm, endoplasmic reticulum, endosome, golgi apparatus, cell membrane, and mitochondrion. Staining: Beclin-1 is stained brown with hematoxylin purple counterstain.



Western Blot

Western Blot of Beclin-1 antibody in A431 cell lysate. Lane A: Beclin-1 antibody at 0.5 $\mu\text{g/mL}$. Lane B: Beclin-1 antibody at 1 $\mu\text{g/mL}$. Lane C: Beclin-1 antibody at 2 $\mu\text{g/mL}$. Load: 35 μg per lane. Primary antibody: Beclin-1 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 52 kDa, 52 kDa for Beclin-1. Other band(s): Beclin-1 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.