

Datasheet for 600-401-MG4S**Beclin 1 Antibody****Overview**

Description:	Anti-Beclin-1 (RABBIT) Antibody - 600-401-MG4S
Item No.:	600-401-MG4S
Size:	25 µL
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	BECLIN1 belongs to the beclin family. Beclin 1 plays a central role in autophagy, a catabolic process of degradation induced by starvation. Acts as core subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate which mediates vesicle-trafficking processes. This protein is thought to play a role in multiple cellular processes, including tumorigenesis, neurodegeneration and apoptosis. May play a role in antiviral host defense. Protects against infection by a neurovirulent strain of Sindbis virus. Localized in the Golgi apparatus > trans-Golgi network membrane. Interaction with ATG14 promotes translocation to autophagosomes. Expressed in dendrites and cell bodies of cerebellar Purkinje cells. Anti-Beclin-1 Antibody is useful for researchers interested in Cancer Research including Cervix Carcinoma and Breast Cancer.
Synonyms:	Rabbit Anti-Beclin-1, Beclin1 Antibody, Beclin 1 Antibody, BECN1, Coiled-Coil Myosin-Like BCL2-Interacting Protein, Beclin 1 Autophagy Related, Beclin 1 (Coiled-Coil, Moesin-Like BCL2 Interacting Protein), ATG6 Autophagy Related 6 Homolog, Protein GT197, VPS30, GT197
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	BECN1
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-BECLIN1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a near N-terminal portion of human Beclin-1 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against human Beclin-1. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to human, mouse, rat, bovine, pongo abelii, and wild boar and 92% to Gallus gallus.
Relevant Links:	• UniProtKB - Q14457 • NCBI - NP_001300927.1 • GeneID - 8678

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-BECLIN-1 Antibody has been tested in ELISA, WB, IF, and IHC. Expect a band at ~51.8kDa in western blot using appropriate lysates. Positive control used: U251-MG in WB; HeLa in IF; Human spleen and colon cancer tissues in IHC.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IF:	5µg/mL
IHC:	1:100-1:200
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

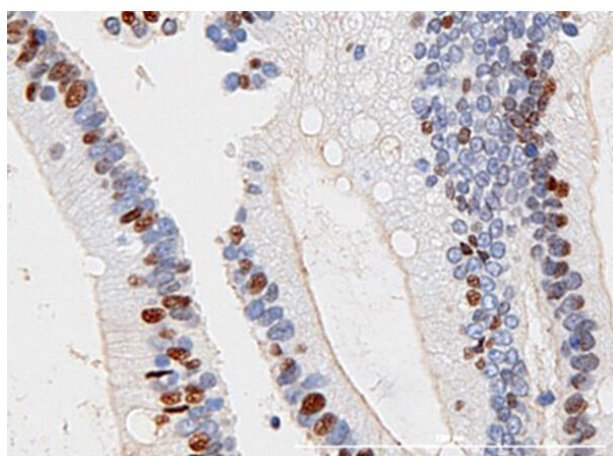
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

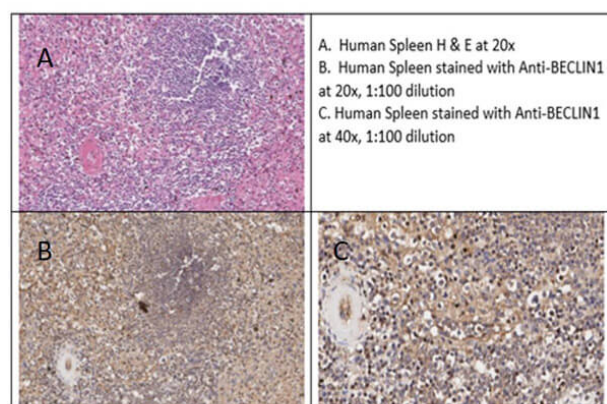
Expiration: Expiration date is one (1) year from date of receipt.

Images



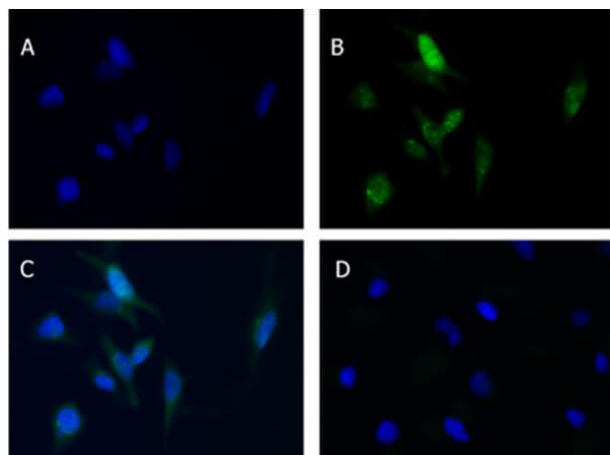
Immunohistochemistry

Immunohistochemistry of Rabbit Anti-Beclin 1 Antibody.
 Tissue: Human colon cancer tissue (40X). Fixative: none.
 Antigen Retrieval: Heat induced epitope retrieval (HIER).
 Primary Antibody: Anti-Beclin 1 at 1:100 for 30mins at RT.
 Secondary Antibody: Anti-Rabbit Poly-HRP-IgG ready to use 8 min at RT. Counterstain: hematoxylin. Expected Localization: nuclear or cytoplasmic staining of normal cells. Less staining of cancer cells. Result Analysis: Passed.
 Epithelial layer staining, nuclear staining, cell-cell junction staining.



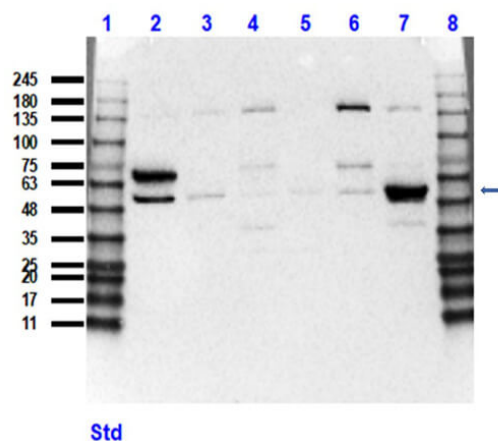
Immunohistochemistry

Immunohistochemistry of Rabbit Anti-Beclin 1 Antibody.
 Tissue: Human Spleen. Fixative: none. Antigen Retrieval: HIER using Citrate buffer for 20 minutes. Primary Antibody: Anti-Beclin 1 at 1:100 for 30mins at RT. Secondary Antibody: Anti-Rabbit Poly-HRP-IgG ready to use 8 min at RT. Counterstain: hematoxylin. Expected Localization: nuclear or cytoplasmic staining of normal cells. Less staining of cancer cells. Result Analysis: shows diffuse moderate cytoplasmic/membranous staining of cells in the white and red pulp in human splenic tissue. Cell staining includes lymphocytes and macrophages as well as endothelial cells.



Immunofluorescence Microscopy

Immunofluorescence of Rabbit Anti-Beclin 1 Antibody. Cells: HeLa cells. Fixative: 100% MeOH. Permeabilization: 0.3% Triton X-100. Primary Antibody: Anti-Beclin-1 at 5 µg/mL overnight at 2-8°C. Secondary Antibody: Donkey Anti-Rabbit IgG DyLight™488 (p/n 611-741-127) at 5 µg/mL for 60mins at RT. Nuclear Counterstain: DAPI. Staining: (A) DAPI, (B) Anti-Beclin1+DyLight, (C) Merge A+B, (D) secondary only. Expected localization: Golgi apparatus, mitochondria, endosome, nucleus.



Western Blot

Western Blot of Rabbit Anti-Beclin 1 Antibody. Lane 1: Opal Prestain Molecular Weight Marker (p/n MB-210-0500). Lane 2: Beclin overexpressing HEK293T lysate (10ug) [+]. Lane 3: HEK293T vector vector (10ug) [-] (p/n W09-001-GX5). Lane 4: U87-MG whole cell lysate (35ug) [+]. Lane 5: C2C12 whole cell lysate (35ug) [+] (p/n W10-001-GL7). Lane 6: MOLT4 whole cell lysate (35ug) [+] (p/n W09-001-GL2). Lane 7: U251-MG whole cell lysate (35ug) [+] (p/n W09-001-GY4). Lane 8: Opal Prestain Molecular Weight Marker (p/n MB-210-0500). Primary Antibody: Anti-Beclin1 at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP (p/n 611-103-122) at 1:40,000 for 60min at RT. Block: 5% BLOTTO/TBST (p/n B501-0500). Expected MW: ~51kDa endogenous, ~50-60kDa overexpressing. Observed MW: ~53, 75kDa.

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.