

Product Datasheet

ATG7 Antibody (EP1759Y)

NB110-55474

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Publications: 5

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB110-55474

Updated 2/5/2017 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/NB110-55474



NB110-55474

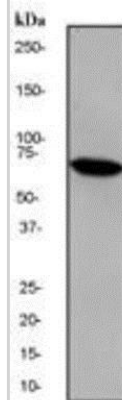
ATG7 Antibody (EP1759Y)

Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	EP1759Y
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Tissue culture supernatant
Buffer	49% PBS, 0.05% BSA and 50% Glycerol
Product Description	
Host	Rabbit
Gene ID	10533
Gene Symbol	ATG7
Species	Human, Mouse (Negative), Rat (Negative)
Reactivity Notes	Cross reactivity determined by western blot only.
Immunogen	A synthetic peptide corresponding to residues near the C-terminus of human Atg7 was used as an immunogen.
Notes	Produced using Abcam's RabMab® technology. RabMab® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487.
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:100000-200000, Flow Cytometry 1:95, Immunohistochemistry 1:10-1:500, Immunocytochemistry/Immunofluorescence 1:250-500, Immunoprecipitation 1:50, Immunohistochemistry-Paraffin 1:100-250
Application Notes	In Western blot this antibody detects a band at approximately 72 kDa.

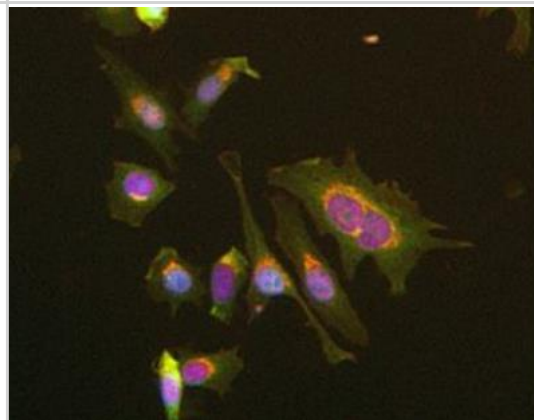


Images

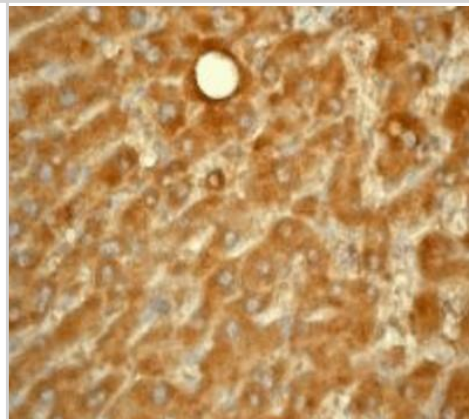
Western Blot: ATG7 Antibody (EP1759Y) [NB110-55474] - Jurkat cell lysate.



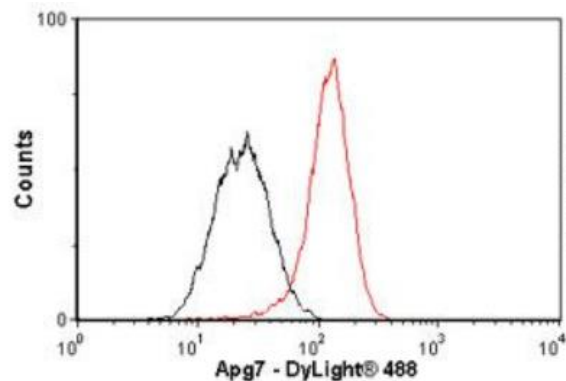
Immunocytochemistry/Immunofluorescence: ATG7 Antibody (EP1759Y) [NB110-55474] - Stained HeLa cells.



Immunohistochemistry: ATG7 Antibody (EP1759Y) [NB110-55474] - Immunohistochemical analysis of paraffin-embedded human liver using anti-Atg7



ATG7 Antibody (EP1759Y) [NB110-55474] - Overlay histogram showing HEK293 cells stained with Apg7 antibody EP1759Y (red line).



Publications

Bortnik S, Choutka C, Horlings HM et al. Identification of breast cancer cell subtypes sensitive to ATG4B inhibition. *Oncotarget*. Oct 11 2016 12:00AM [PMID: 27556700] (WB, Human)

Liao Cl, Chen Cm, Chang Yz et al. Pine (*Pinus morrisonicola* Hayata) needle Extracts Sensitize GBM8901 Human Glioblastoma Cells to Temozolomide by Downregulating Autophagy and O(6)-Methylguanine-DnA Methyltransferase Expression. *J. Agric. Food Chem.* 2014 Oct 29 [PMID: 25293350]

Egger ME, Huang JS, Yin W et al. Inhibition of autophagy with chloroquine is effective in melanoma. *J Surg Res* 2013 May 17 [PMID: 23706562] (WB, Human)

Yang S, Wang X, Contino G et al. Pancreatic cancers require autophagy for tumor growth. *Genes Dev* 2011 Apr [PMID: 21406549]

Dash R, Azab B, Quinn B et al. Apogossypol derivative BI-97C1 (Sabutoclax) targeting Mcl-1 sensitizes prostate cancer cells to mda-7/IL-24-mediated toxicity *Proc Natl Acad Sci U S A* 2011 May 24 [PMID: 21555592] (WB, Human)





Immunohistochemistry Protocol for ATG7 Antibody (NB110-55474)

Immunohistochemistry Protocol for Paraffin-embedded Tissues

1. Solutions and reagents

1.1. Xylene

1.2. Ethanol, anhydrous denatured, histological grade (100%, 95%, 70%)

1.3. Washing buffer:

TBST washing buffer: 1XTBS/0.1% Tween-20

To prepare stock solution of 10X TBS: add 24.2 g Trizma base and 80 g sodium chloride to 1L of dH₂O. Adjust pH to 7.6.Working solution. 1XTBST/0.1% Tween-20: add 100ml 10XTBS to 900 ml dH₂O. Add 1 ml Tween-20 and mix well.1.4. Distilled water (dH₂O)

1.5. Antigen Retrieval Solution:

0.01M Sodium Citrate Buffer, pH 6.0

To prepare stock solutions:

Solution A. 0.1 M citric acid solution: dissolve 21.0 g of citric acid, monohydrate (C₆H₈O₇.H₂O) in 1 liter of dH₂O.Solution B. 0.1M sodium citrate solution: dissolve 29.4 g trisodium citrate dihydrate (C₆H₅Na₃O₇.2H₂O) in 1 liter of dH₂O.Working solution: Add 9 ml of Stock solution A and 41 ml of stock solution B to 450 ml of dH₂O. Adjust pH to 6.0.

1.6. 3% Hydrogene Peroxide

1.7. Blocking buffer:

PBS (Dulbeccos Phosphate Buffered Salts, 1X, catalog #21-031-CV from Mediatech, Inc.) + 10% serum (serum origin depends on the host of the secondary antibody)

1.8. Hematoxylin QS (catalog #H-3404 from Vector Laboratories, Inc.)

1.9. Permanent Mounting medium (VectaMount, catalog# H-5000 Vector Laboratories, Inc.)

2. Protocol**2.1. Deparaffinization/Rehydration**

2.1.1. Heat slides in an oven at 65C for 1 hour.

2.1.2. De-paraffinize/hydrate using the following series of washes: two Xylene washes (5 min each), followed by two 100% ethanol rinses (5 min each), followed by 95% ethanol, 70% ethanol, 50% ethanol, 30% ethanol, followed by H₂O and a TBST wash for 5 min on a shaker.**2.2. Antigen Retrieval**

2.2.1. Immerse slides into staining dish containing Antigen Retrieval Solution.

2.2.2. Place covered staining dish into the rice cooker. Add 120 ml of dH₂O.

2.2.3. When cook is turned to warm (about 20 to 30 min), unplug the cooker and remove the staining dish to the bench top.

2.2.4. Allow to cool down, without cover, for 20 min.

2.3. Staining

2.3.1. Wash slides with TBST for 5 min on a shaker.

2.3.2. Inactivate endogenous peroxidase by covering tissue with 3% hydrogen peroxide for 10 min.

2.3.3. Wash slides three times with TBST (3 min each on a shaker).

2.3.4. Block slides with the blocking solution for 1 hour.

2.3.5. Dilute primary antibody in the blocking buffer per recommendation on the data sheet.

2.3.6. Apply primary antibody to each section and incubate overnight in the humidified chamber (4C).

2.3.7. Wash slides three times with TBST (3 min each on a shaker).

2.3.8. Apply to each section secondary HRP-conjugated anti-rabbit antibody diluted in the blocking solution per manufacturers recommendation; incubate for 1 hour at room temperature.

2.3.9. Wash slides three times with TBST (3 min each on a shaker).

2.3.10. Add freshly prepared DAB substrate to the sections.

2.3.11. Incubate tissue sections with the substrate at room temperature until suitable staining develops (generally 2 to 5 min).

2.3.12. Rinse sections with water.

2.3.13. Counterstain with Hematoxylin.

2.3.14. Rinse sections with water.

2.3.15. Dehydrate samples using two rinses with 100% Ethanol (20 dips per rinse) followed by two rinses with Xylene (30 dips per rinse).

2.3.16. Mount coverslips on slides using Permount medium.



Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
novus@novusbio.com

Novus Biologicals Canada

461 North Service Road West, Unit B37
Oakville, ON L6M 2V5
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada@novusbio.com

Novus Biologicals Europe

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: technical@novusbio.com
Orders: orders@novusbio.com
General: novus@novusbio.com

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

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NB110-55474

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications

