




Product datasheet

Anti-ATG3 antibody [2C10A12] α b233562

7 Images

Overview

Product name	Anti-ATG3 antibody [2C10A12]
Description	Mouse monoclonal [2C10A12] to ATG3
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow 
Immunogen	Recombinant fragment corresponding to Human ATG3 aa 1-100. Expressed in E. coli. Database link: Q9NT62  Run BLAST with  Run BLAST with
Positive control	WB: Recombinant human ATG3 protein (amino acids 1-100). ATG3 (amino acids: 1-100) - hlgGfC transfected HEK-293 cell lysate. HeLa, K562 and THP-1 cell lysate. ICC/IF: SMMC-7721 cells. Flow Cytometry: Jurkat cells. IHC-P: Human stomach cancer and rectum cancer tissue.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein G purified
Purification notes	Purified from TCS.
Clonality	Monoclonal
Clone number	2C10A12

Isotype

IgG1

Applications

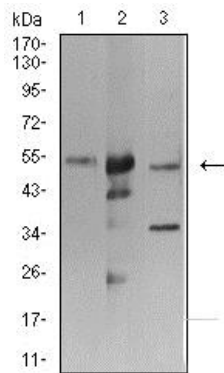
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab233562 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/2000. Predicted molecular weight: 36 kDa.
IHC-P		1/200 - 1/1000.
Flow Cyt		1/200 - 1/400.
ICC/IF		1/200 - 1/1000.

Target

Function	E2-like enzyme involved in autophagy and mitochondrial homeostasis. Catalyzes the conjugation of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A) to phosphatidylethanolamine (PE). PE-conjugation to ATG8-like proteins is essential for autophagy. Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3.
Tissue specificity	Widely expressed, with a highest expression in heart, skeletal muscle, kidney, liver and placenta.
Sequence similarities	Belongs to the ATG3 family.
Post-translational modifications	Conjugated to ATG12 at Lys-243. ATG12-conjugation plays a role in regulation of mitochondrial homeostasis and cell death, while it is not involved in PE-conjugation to ATG8-like proteins and autophagy.
Cellular localization	Cytoplasm.

Images



Western blot - Anti-ATG3 antibody [2C10A12]
(ab233562)

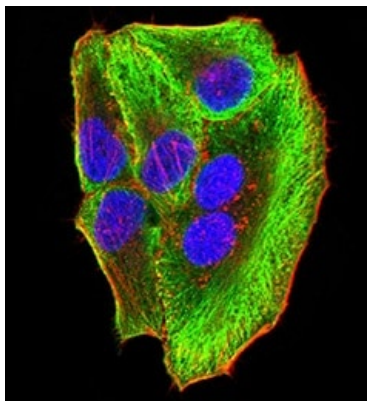
All lanes : Anti-ATG3 antibody [2C10A12] (ab233562) at 1/500 dilution

Lane 1 : K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate

Lane 3 : THP-1 (Human monocytic leukemia cell line) cell lysate

Predicted band size: 36 kDa



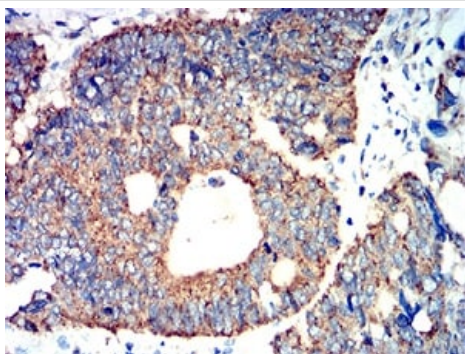
Immunocytochemistry/ Immunofluorescence - Anti-ATG3 antibody [2C10A12] (ab233562)

SMMC-7721 cells stained for ATG3 (green) using ab233562 (1/200 dilution) in ICC/IF.

Blue: DRAQ5 fluorescent DNA dye.

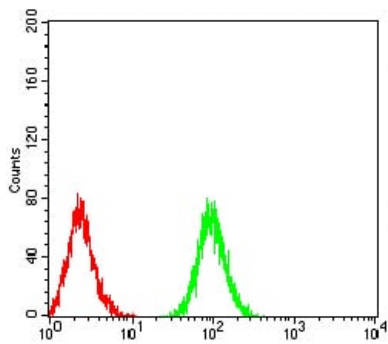
Red: Actin filaments have been labeled with Alexa Fluor[®]555 phalloidin.

Secondary antibody: Goat anti-Mouse IgG (H+L) DyLight 488.



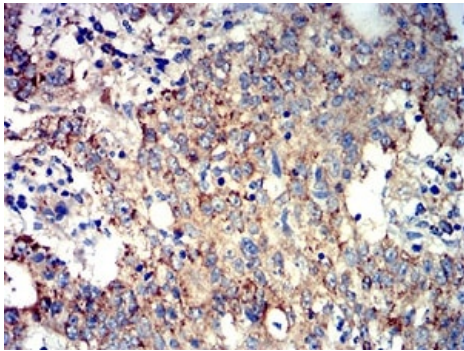
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG3 antibody [2C10A12] (ab233562)

Paraffin-embedded human rectum cancer tissue stained for ATG3 with ab233562 at a 1/200 dilution in immunohistochemical analysis. DAB staining.



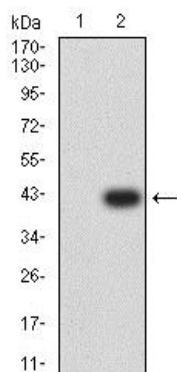
Flow Cytometry - Anti-ATG3 antibody [2C10A12]
(ab233562)

Flow Cytometry analysis of Jurkat (Human T cell leukemia cell line from peripheral blood) cells, labeling ATG3 with ab233562 at a 1/200 dilution (green) compared to a negative control (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG3 antibody [2C10A12] (ab233562)

Paraffin-embedded human stomach cancer tissue stained for ATG3 with ab233562 at a 1/200 dilution in immunohistochemical analysis. DAB staining.



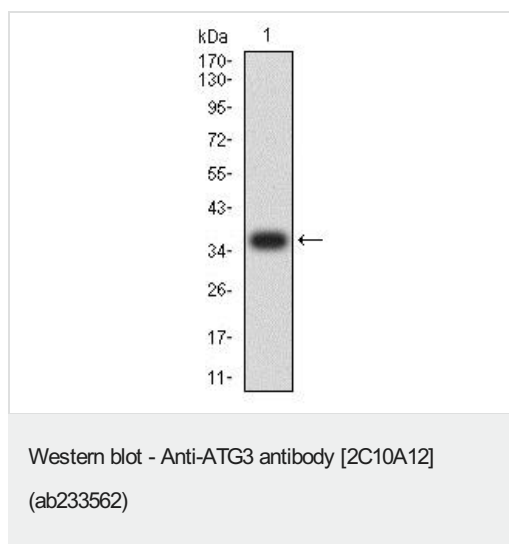
Western blot - Anti-ATG3 antibody [2C10A12]
(ab233562)

All lanes : Anti-ATG3 antibody [2C10A12] (ab233562) at 1/500 dilution

Lane 1 : HEK-293 (Human epithelial cell line from embryonic kidney) cell lysate

Lane 2 : ATG3 (amino acids: 1-100) - hlgGfC transfected HEK-293 (Human epithelial cell line from embryonic kidney) cell lysate

Predicted band size: 36 kDa



Anti-ATG3 antibody [2C10A12] (ab233562) at 1/500 dilution +
Recombinant human ATG3 protein (amino acids 1-100)

Predicted band size: 36 kDa

(Expected MW is 37.3 kDa)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors