


Product datasheet

Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] ab180125

Recombinant RabMAb

[1 References](#) [6 Images](#)

Overview

Product name	Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)]
Description	Rabbit monoclonal [EPR14203(B)] to E1 Ubiquitin Activating Enzyme 1/UBA1
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide within Human E1 Ubiquitin Activating Enzyme 1/UBA1 aa 200-300. The exact sequence is proprietary. Database link: P22314
Positive control	Fetal brain, K562, HeLa and Jurkat cell lysates; Human ovarian carcinoma tissue; Jurkat and K562 cells, GST-tagged full-length recombinant human UBA1 and UBA7 proteins.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

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: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR14203(B)
Isotype	IgG

Applications

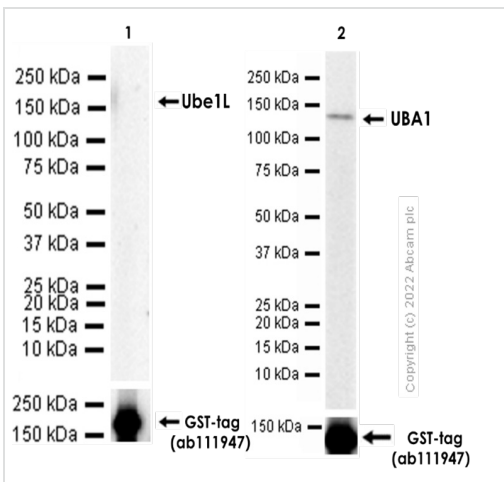
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab180125 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/70. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/2000 - 1/10000. Detects a band of approximately 117 kDa (predicted molecular weight: 118 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.

Target

Function	Activates ubiquitin by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding an ubiquitin-E1 thioester and free AMP.
Pathway	Protein modification; protein ubiquitination.
Involvement in disease	Defects in UBA1 are the cause of spinal muscular atrophy X-linked type 2 (SMA2) [MIM:301830]; also known as X-linked lethal infantile spinal muscular atrophy, distal X-linked arthrogryposis multiplex congenita or X-linked arthrogryposis type 1 (AMCX1). Spinal muscular atrophy refers to a group of neuromuscular disorders characterized by degeneration of the anterior horn cells of the spinal cord, leading to symmetrical muscle weakness and atrophy. SMA2 is a lethal infantile form presenting with hypotonia, areflexia, and multiple congenital contractures.
Sequence similarities	Belongs to the ubiquitin-activating E1 family.
Post-translational modifications	ISGylated.

Images



Western blot - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125)

All lanes : Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125) at 1/1000 dilution

Lane 1 : GST tagged Recombinant Human UBA7(Ube1L) protein (Full length, 166 KDa)

Lane 2 : GST tagged Recombinant Human UBA1 protein (Full length, 146 KDa)

Secondary

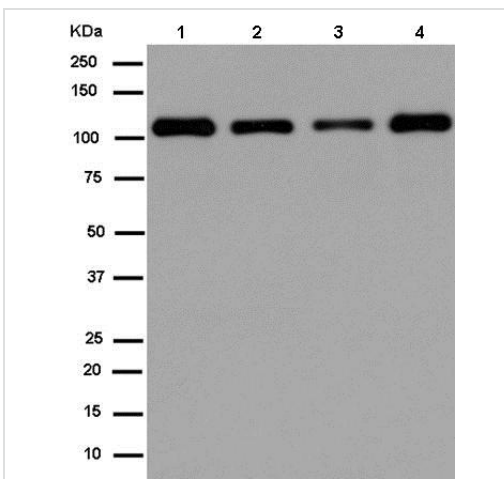
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 118 kDa

Observed band size: 146,166 kDa

Exposure time: 180 seconds

Blocking and Diluting buffer: 5% NFDm/TBST



Western blot - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125)

All lanes : Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125) at 1/5000 dilution

Lane 1 : Fetal brain tissue lysate

Lane 2 : K562 cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : Jurkat cell lysate

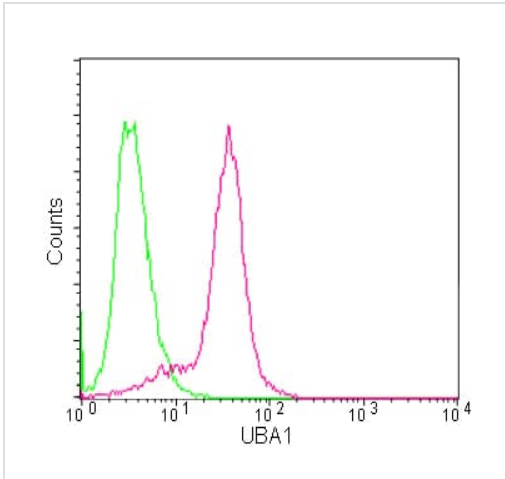
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

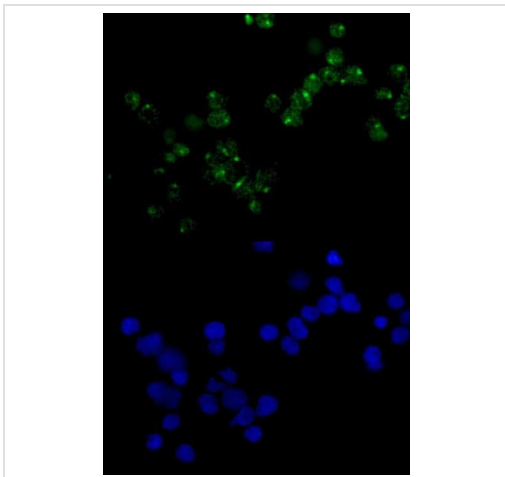
Predicted band size: 118 kDa

Observed band size: 117 kDa



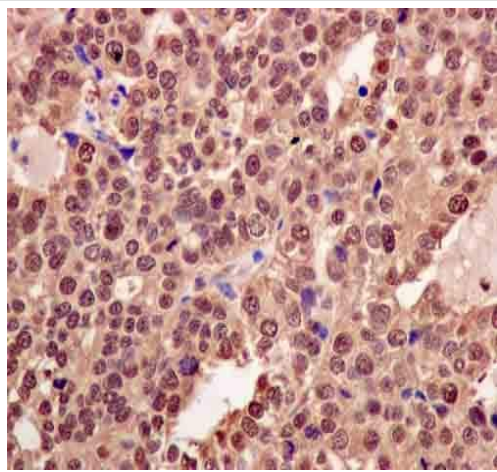
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed K562 cells labeling E1 Ubiquitin Activating Enzyme with ab180125 at 1/70 dilution (red) compared to a rabbit IgG control (green), followed by Goat anti rabbit IgG (FITC) secondary antibody at 1/75 dilution.

Flow Cytometry (Intracellular) - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125)



Immunofluorescent analysis of acetone-fixed Jurkat cells labeling E1 Ubiquitin Activating Enzyme with ab180125 at 1/100 dilution, followed by Goat anti rabbit IgG (Dylight 488) at 1/250 dilution. Counter stained with DAPI (blue).


Immunocytochemistry/ Immunofluorescence - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125)



Immunohistochemical analysis of paraffin-embedded Human ovarian carcinoma tissue labeling E1 Ubiquitin Activating Enzyme with ab180125 at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin. Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125)

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14203(B)] (ab180125)

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