


# Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14204(B)] - BSA and Azide free ab250441

Recombinant RabMAb

5 Images

### Overview

<b>Product name</b>	Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14204(B)] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR14204(B)] to E1 Ubiquitin Activating Enzyme 1/UBA1 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, Flow Cyt (Intra), ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>General notes</b>	<p>ab250441 is the carrier-free version of <a href="#">ab181225</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR14204(B)
<b>Isotype</b>	IgG

## Applications

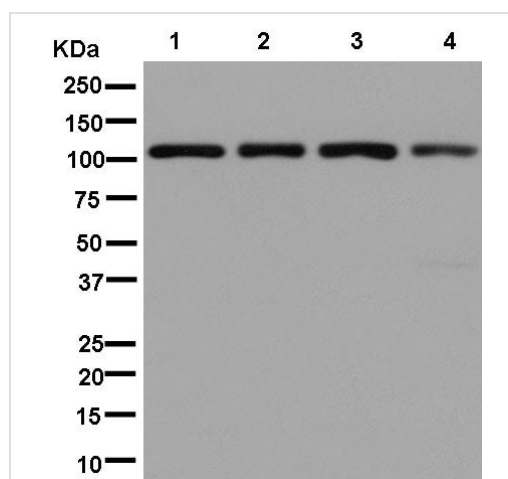
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab250441 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>IHC-P</b>		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
<b>Flow Cyt (Intra)</b>		Use at an assay dependent concentration.
<b>ICC/IF</b>		Use at an assay dependent concentration.
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 118 kDa (predicted molecular weight: 118 kDa).

## Target

<b>Function</b>	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.
<b>Pathway</b>	Protein modification; protein ubiquitination.
<b>Involvement in disease</b>	Defects in UBA1 are the cause of spinal muscular atrophy X-linked type 2 (SMAX2) [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. SMAX2 is a lethal infantile form presenting with hypotonia, areflexia, and multiple congenital contractures.
<b>Sequence similarities</b>	Belongs to the ubiquitin-activating E1 family.
<b>Post-translational modifications</b>	ISGylated.

## Images



Western blot - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14204(B)] - BSA and Azide free (ab250441)

**All lanes :** Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14204(B)] ([ab181225](#)) at 1/10000 dilution

**Lane 1 :** Human 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.

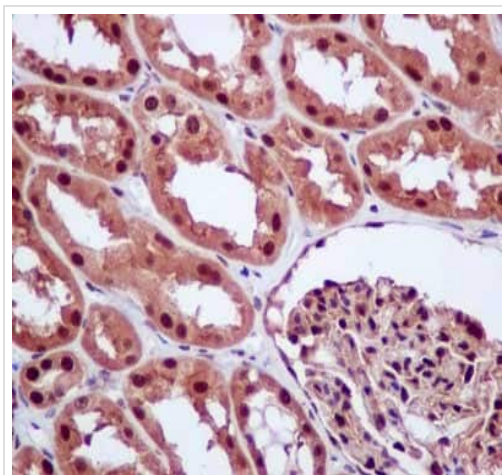
### Secondary

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

**Predicted band size:** 118 kDa

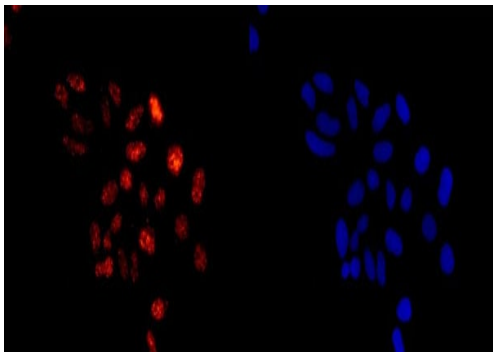
**Observed band size:** 118 kDa

This data was developed using [ab181225](#), the same antibody clone in a different buffer formulation.



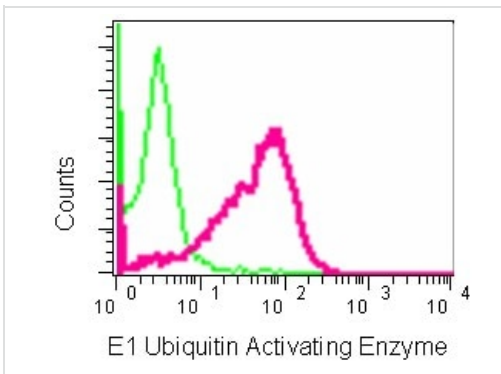
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14204(B)] - BSA and Azide free (ab250441)

This data was developed using [ab181225](#), the same antibody clone in a different buffer formulation. Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling E1 Ubiquitin Activating Enzyme with [ab181225](#) at 1/100 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.



Immunocytochemistry/ Immunofluorescence - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14204(B)] - BSA and Azide free (ab250441)

This data was developed using **ab181225**, the same antibody clone in a different buffer formulation. Immunofluorescent analysis of acetone-fixed HeLa cells labeling E1 Ubiquitin Activating Enzyme with **ab181225** at 1/250 dilution, followed by Goat anti rabbit IgG (Alexa Fluor® 555) secondary antibody at 1/200 dilution (red). Counter stained with Dapi (blue).







Flow Cytometry (Intracellular) - Anti-E1 Ubiquitin Activating Enzyme 1/UBA1 antibody [EPR14204(B)] - BSA and Azide free (ab250441)

This data was developed using **ab181225**, the same antibody clone in a different buffer formulation.

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed K562 cells labeling E1 Ubiquitin Activating Enzyme with **ab181225** at 1/10 dilution (red) compared to a Rabbit monoclonal IgG isotype control (green), followed by Goat anti rabbit IgG (FITC) secondary antibody at 1/150 dilution.

### Why choose a recombinant antibody?

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

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

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