


## Product datasheet

### Anti-USP28 antibody [EPR4250(2)] ab110744

KO **VALIDATED** Recombinant RabMAb

★☆☆☆☆ [1 Abreviews](#) [2 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-USP28 antibody [EPR4250(2)]
<b>Description</b>	Rabbit monoclonal [EPR4250(2)] to USP28
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt, ICC/IF, IHC-P or IP
<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>Positive control</b>	293T, SW480, HeLa, and A431 cell lysates.
<b>General notes</b>	<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 -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4250(2)

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab110744 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)	1/1000 - 1/10000. Predicted molecular weight: 122 kDa.

### Application notes

Is unsuitable for Flow Cyt, ICC/IF, IHC-P or IP.

## Target

### Function

Deubiquitinase involved in DNA damage response checkpoint and MYC proto-oncogene stability. Involved in DNA damage induced apoptosis by specifically deubiquitinating proteins of the DNA damage pathway such as CLSPN. Also involved in G2 DNA damage checkpoint, by deubiquitinating CLSPN, and preventing its degradation by the anaphase promoting complex/cyclosome (APC/C). In contrast, it does not deubiquitinate PLK1. Specifically deubiquitinates MYC in the nucleoplasm, leading to prevent MYC degradation by the proteasome: acts by specifically interacting with isoform 1 of FBXW7 (FBW7alpha) in the nucleoplasm and counteracting ubiquitination of MYC by the SCF(FBW7) complex. In contrast, it does not interact with isoform 4 of FBXW7 (FBW7gamma) in the nucleolus, allowing MYC degradation and explaining the selective MYC degradation in the nucleolus.

### Sequence similarities

Belongs to the peptidase C19 family. USP28 subfamily.  
Contains 1 UIM (ubiquitin-interacting motif) repeat.

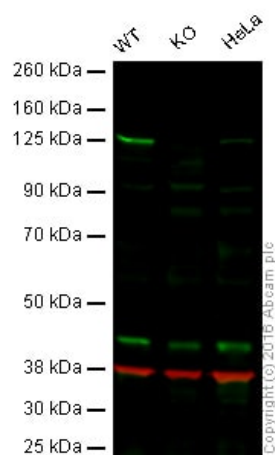
### Post-translational modifications

Degradaded upon nickel ion level or hypoxia exposure.  
Phosphorylated upon DNA damage at Ser-67 and Ser-714, by ATM or ATR.

### Cellular localization

Nucleus > nucleoplasm.

## Images



Western blot - Anti-USP28 antibody [EPR4250(2)]  
(ab110744)

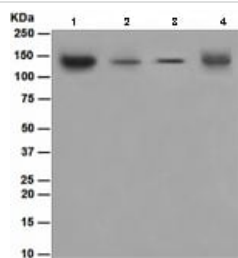
**Lane 1:** Wild-type HAP1 cell lysate (20 µg)

**Lane 2:** USP28 knockout HAP1 cell lysate (20 µg)

**Lane 3:** HeLa cell lysate (20 µg)

**Lanes 1 - 3:** Merged signal (red and green). Green - ab110744 observed at 128 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab110744 was shown to specifically react with USP28 when USP28 knockout samples were used, along with additional cross-reactive bands. Wild-type and USP28 knockout samples were subjected to SDS-PAGE. Ab110744 and **ab8245** (loading control to GAPDH) were diluted at 1/500 and 1/10,000 dilution respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-USP28 antibody [EPR4250(2)]  
(ab110744)

**All lanes :** Anti-USP28 antibody [EPR4250(2)] (ab110744) at 1/1000 dilution

**Lane 1 :** 293T cell lysate

**Lane 2 :** SW480 cell lysate

**Lane 3 :** HeLa cell lysate

**Lane 4 :** A431 cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 122 kDa

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-USP28 antibody [EPR4250(2)] (ab110744)

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

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- 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
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