

## Product datasheet

### Anti-HAUSP / USP7 antibody [BLR072G] ab264422

Recombinant

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

#### Overview

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<b>Product name</b>	Anti-HAUSP / USP7 antibody [BLR072G]
<b>Description</b>	Rabbit monoclonal [BLR072G] to HAUSP / USP7
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide within Human HAUSP/ USP7 aa 1-50. The exact sequence is proprietary. NP_003461.2 Database link: <a href="#">Q93009</a>
<b>Positive control</b>	IHC-P: Human prostate carcinoma tissue. Mouse renal cell carcinoma tissue. ICC; OVCAR-4 cells. WB: RKO, HEK-293T, K562, HepG2, MCF7, Jurkat, HeLa, U-2 OS, NIH/3T3 and TCMK-1 whole cell lysates. IP: HEK-293T whole cell lysate.
<b>General notes</b>	This product is sold under License from Bethyl Laboratories, Inc.

#### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.8 Preservative: 0.09% Sodium azide Constituents: 1% BSA, 0.6% Boric Acid, 0.9% Sodium borate, 0.4% Sodium chloride
<b>Purification notes</b>	Purified from cell culture supernatant.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	BLR072G
<b>Isotype</b>	IgG

#### Applications

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## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab264422 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
IP		Use at an assay dependent concentration. Use 20 µl/mg lysate.
WB		1/1000. Predicted molecular weight: 128 kDa.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/500. Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.

## Target

### Function

Hydrolase that deubiquitinates target proteins such as FOXO4, p53/TP53, MDM2, ERCC6, DNMT1, UHRF1, PTEN and DAXX (PubMed:11923872, PubMed:15053880, PubMed:16964248, PubMed:18716620, PubMed:25283148). Together with DAXX, prevents MDM2 self-ubiquitination and enhances the E3 ligase activity of MDM2 towards p53/TP53, thereby promoting p53/TP53 ubiquitination and proteasomal degradation. Deubiquitinates p53/TP53, preventing degradation of p53/TP53, and enhances p53/TP53-dependent transcription regulation, cell growth repression and apoptosis (PubMed:25283148). Deubiquitinates p53/TP53 and MDM2 and strongly stabilizes p53/TP53 even in the presence of excess MDM2, and also induces p53/TP53-dependent cell growth repression and apoptosis. Deubiquitination of FOXO4 in presence of hydrogen peroxide is not dependent on p53/TP53 and inhibits FOXO4-induced transcriptional activity. In association with DAXX, is involved in the deubiquitination and translocation of PTEN from the nucleus to the cytoplasm, both processes that are counteracted by PML. Involved in cell proliferation during early embryonic development. Involved in transcription-coupled nucleotide excision repair (TC-NER) in response to UV damage: recruited to DNA damage sites following interaction with KIAA1530/UVSSA and promotes deubiquitination of ERCC6, preventing UV-induced degradation of ERCC6. Contributes to the overall stabilization and trans-activation capability of the herpesvirus 1 trans-acting transcriptional protein ICP0/VMW110 during HSV-1 infection. Involved in maintenance of DNA methylation via its interaction with UHRF1 and DNMT1: acts by mediating deubiquitination of UHRF1 and DNMT1, preventing their degradation and promoting DNA methylation by DNMT1 (PubMed:21745816). Exhibits a preference towards 'Lys-48'-linked ubiquitin chains. Increases regulatory T-cells (Treg) suppressive capacity by deubiquitinating and stabilizing the transcription factor FOXP3 which is crucial for Treg cell function (PubMed:23973222).

### Tissue specificity

Widely expressed. Overexpressed in prostate cancer.

### Sequence similarities

Belongs to the peptidase C19 family.  
Contains 1 MATH domain.  
Contains 1 USP domain.

### Domain

The C-terminus plays a role in its oligomerization.

### Post-translational modifications

Isoform 1: Phosphorylated. Isoform 1 is phosphorylated at positions Ser-18 and Ser-963. Isoform 2: Not phosphorylated.  
Isoform 1: Polyneddylated. Isoform 2: Not Polyneddylated.

Isoform 1 and isoform 2: Not sumoylated.

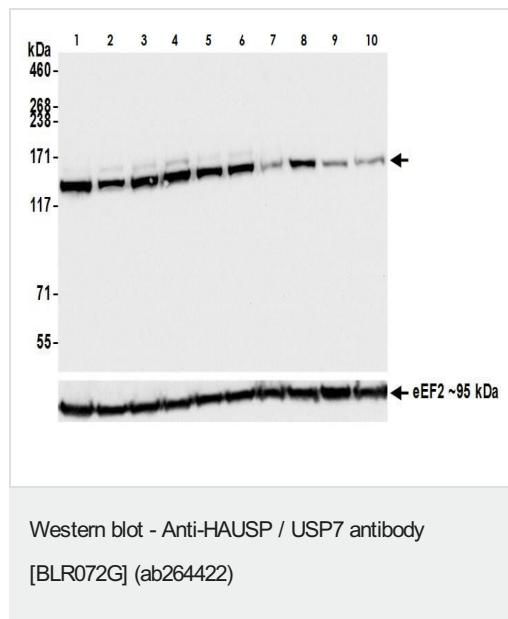
Isoform 1 and isoform 2: Polyubiquitinated by herpesvirus 1 trans-acting transcriptional protein ICP0/VMW110; leading to its subsequent proteasomal degradation. Isoform 1: Ubiquitinated at Lys-869.

### Cellular localization

Nucleus. Cytoplasm. Nucleus, PML body. Present in a minority of ND10 nuclear bodies.

Association with ICP0/VMW110 at early times of infection leads to an increased proportion of USP7-containing ND10. Colocalizes with ATXN1 in the nucleus. Colocalized with DAXX in speckled structures. Colocalized with PML and PTEN in promyelocytic leukemia protein (PML) nuclear bodies.

### Images



**All lanes :** Anti-HAUSP / USP7 antibody [BLR072G] (ab264422) at 1/1000 dilution

**Lane 1 :** RKO whole cell lysate

**Lane 2 :** HEK-293T whole cell lysate

**Lane 3 :** K562 whole cell lysate

**Lane 4 :** HepG2 whole cell lysate

**Lane 5 :** MCF7 whole cell lysate

**Lane 6 :** Jurkat whole cell lysate

**Lane 7 :** HeLa whole cell lysate

**Lane 8 :** U-2 OS whole cell lysate

**Lane 9 :** NIH/3T3 whole cell lysate

**Lane 10 :** TCMK-1 whole cell lysate

Lysates/proteins at 50 µg per lane.

#### Secondary

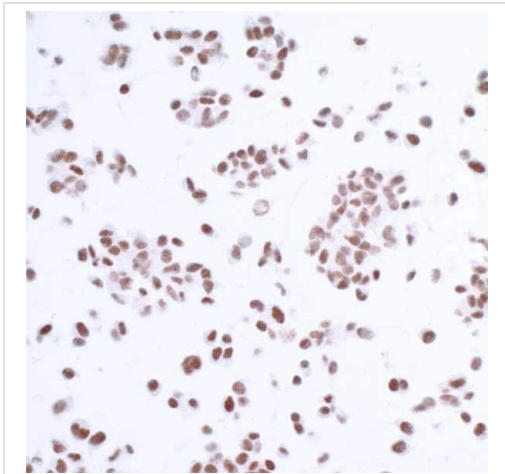
**All lanes :** HRP-conjugated goat anti-rabbit IgG

Developed using the ECL technique.

**Predicted band size:** 128 kDa

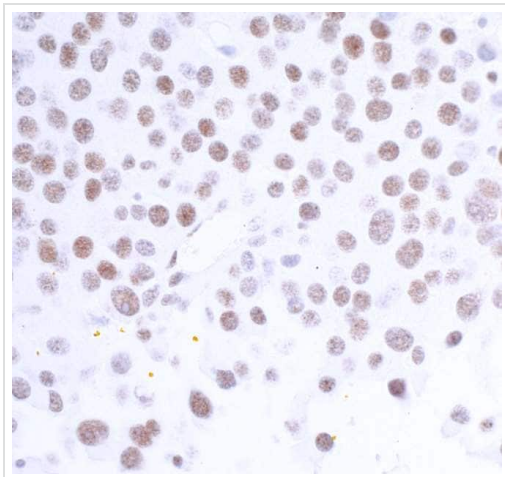
**Exposure time:** 3 seconds

Lysates prepared using NETN lysis buffer.



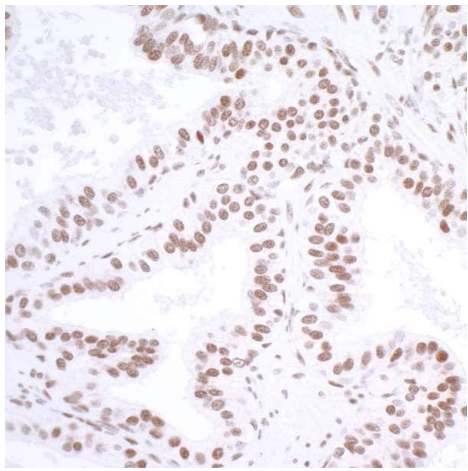
Immunocytochemistry/ Immunofluorescence - Anti-HAUSP / USP7 antibody [BLR072G] (ab264422)

Immunocytochemical analysis of formalin-fixed, paraffin-embedded OVCAR-4 (Human ovarian cancer cell line) cells labeling HAUSP / USP7 with ab264422 at 1/250 dilution. Secondary: HRP-conjugated goat anti-rabbit IgG. Substrate: DAB.



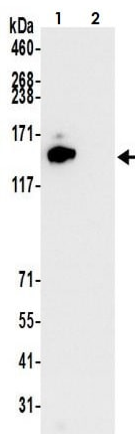
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HAUSP / USP7 antibody [BLR072G] (ab264422)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded mouse renal cell carcinoma tissue labeling HAUSP / USP7 with ab264422 at 1/250 dilution. Secondary: HRP-conjugated goat anti-rabbit IgG. Substrate: DAB.



Immunohistochemical analysis of formalin-fixed, paraffin-embedded human prostate carcinoma tissue labeling HAUSP / USP7 with ab264422 at 1/250 dilution. Secondary: HRP-conjugated goat anti-rabbit IgG. Substrate: DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HAUSP / USP7 antibody [BLR072G] (ab264422)



HAUSP / USP7 was immunoprecipitated from HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) with ab264422 at 20  $\mu$ l/mg lysate. Western blot was performed from the immunoprecipitates using ab264422 at 1/1000 dilution

**Lane 1:** ab264422 IP in HEK-293T whole cell lysate.

**Lane 2:** Control IgG IP in HEK-293T whole cell lysate.

Detection: Chemiluminescence with an exposure time of 3 seconds.

Lysates prepared using NETN lysis buffer.

Immunoprecipitation - Anti-HAUSP / USP7 antibody [BLR072G] (ab264422)

### 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-HAUSP / USP7 antibody [BLR072G]  
(ab264422)

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

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