

## Rabbit HAUSP/USP7 Polyclonal Antibody | anti-HAUSP/USP7 antibody

Anti-HAUSP/USP7 Picoband antibody

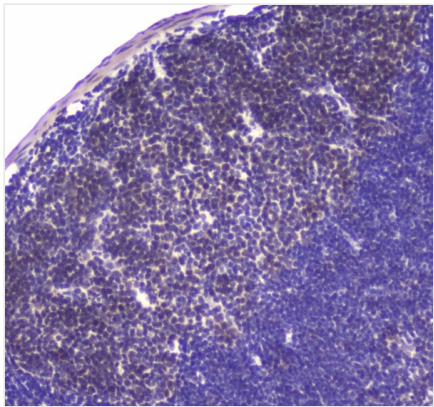
| CATALOG # | HOST   | REACTIVITY                                                    | APPLICATIONS                              |
|-----------|--------|---------------------------------------------------------------|-------------------------------------------|
| AAA124632 | Rabbit | Human, Mouse, Rat<br>No cross reactivity with other proteins. | Western Blot, Immunohistochemistry, ELISA |

### PRODUCT SYNONYMS

HAUSP/USP7; Polyclonal Antibody; Anti-HAUSP/USP7 Picoband antibody; Ubiquitin carboxyl-terminal hydrolase 7; anti-HAUSP/USP7 antibody

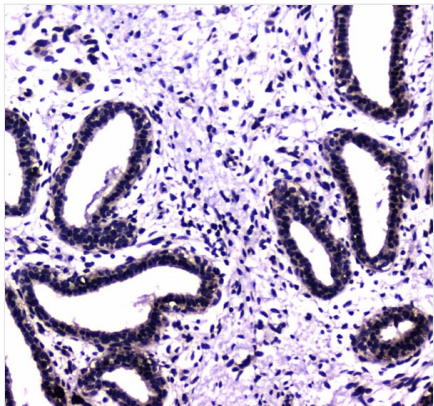
### PRODUCT SPECIFICATIONS

|                                                      |                                                                                                                                                                                                            |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                                 | Rabbit                                                                                                                                                                                                     |
| Reactivity                                           | Human, Mouse, Rat<br>No cross reactivity with other proteins.                                                                                                                                              |
| Clonality                                            | Polyclonal                                                                                                                                                                                                 |
| Form/Format                                          | Lyophilized                                                                                                                                                                                                |
| Sequence Length                                      | â€”                                                                                                                                                                                                        |
| Applicable Applications for anti-HAUSP/USP7 antibody | WB (Western Blot), IHC (Immunohistochemistry), ELISA                                                                                                                                                       |
| Immunogen                                            | E Coli-derived human HAUSP/USP7 recombinant protein (Position: L258-D483).                                                                                                                                 |
| Subcellular Localization                             | Nucleus.                                                                                                                                                                                                   |
| Tissue Specificity                                   | Widely expressed. Overexpressed in prostate cancer.                                                                                                                                                        |
| Reconstitution                                       | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                       |
| Contents                                             | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.                                                                                                                                  |
| Preparation and Storage                              | Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing. |



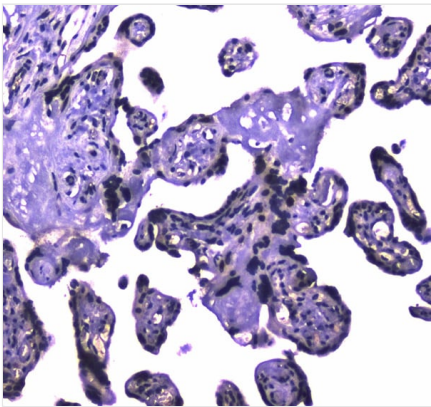
IHC (Immunohistochemistry)

Figure 4. IHC analysis of HAUSP/USP7 using anti-HAUSP/USP7 antibody (AAA124632).HAUSP/USP7 was detected in paraffin-embedded section of mouse Lymph nodes tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HAUSP/USP7 Antibody (AAA124632) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



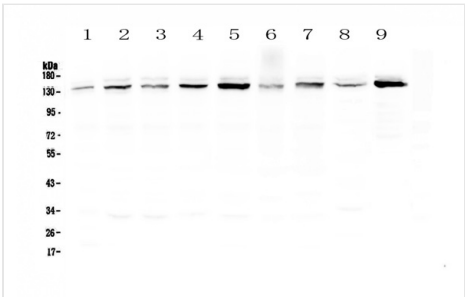
IHC (Immunohistochemistry)

Figure 2. IHC analysis of HAUSP/USP7 using anti-HAUSP/USP7 antibody (AAA124632).HAUSP/USP7 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HAUSP/USP7 Antibody (AAA124632) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of HAUSP/USP7 using anti-HAUSP/USP7 antibody (AAA124632).HAUSP/USP7 was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HAUSP/USP7 Antibody (AAA124632) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of HAUSP/USP7 using anti-HAUSP/USP7 antibody (AAA124632).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human Hela whole cell lysates,Lane 2: human 22RV1 whole cell lysates,Lane 3: human A431 whole cell lysates,Lane 4: human HepG2 whole cell lysates,Lane 5: human HepG2 whole cell lysates,Lane 6: human SGC-7901 whole cell lysates,Lane 7: human A549 whole cell lysates,Lane 8: rat brain tissue lysates,Lane 9: mouse testis tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HAUSP/USP7 antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HAUSP/USP7 at approximately 140KD. The expected band size for HAUSP/USP7 is at 128KD.

ADDITIONAL INFORMATION

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| Related Product Information for anti-HAUSP/USP7 antibody | <p>Description: Ubiquitin-specific-processing protease 7 (USP7), also known as ubiquitin carboxyl-terminal hydrolase 7 or herpesvirus-associated ubiquitin-specific protease (HAUSP), is an enzyme that in humans is encoded by the USP7 gene. The protein encoded by this gene belongs to the peptidase C19 family, which includes ubiquitinyl hydrolases. This protein deubiquitinates target proteins such as p53 (a tumor suppressor protein) and WASH (essential for endosomal protein recycling), and regulates their activities by counteracting the opposing ubiquitin ligase activity of proteins such as HDM2 and TRIM27, involved in the respective process. Mutations in this gene have been implicated in a neurodevelopmental disorder.</p> <p>Protein 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 (PubMed: 15053880, PubMed: 16845383, PubMed: 18566590, PubMed: 20153724). 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 (PubMed: 11923872). Deubiquitination of FOXO4 in presence of hydrogen peroxide is not dependent on p53/TP53 and inhibits FOXO4-induced transcriptional activity (PubMed: 16964248). 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 (PubMed: 18716620). 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 (PubMed: 22466611, PubMed: 22466612). 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, PubMed: 22411829). Acts as a chromatin regulator via its association with the Polycomb group (PcG) multiprotein PRC1-like complex; may act by deubiquitinating components of the PRC1-like complex (PubMed: 20601937). Able to mediate deubiquitination of histone H2B; it is however unsure whether this activity takes place in vivo (PubMed: 20601937). Exhibits a preference towards 'Lys-48'-linked ubiquitin chains (PubMed: 22689415). Increases regulatory T-cells (Treg) suppressive capacity by deubiquitinating and stabilizing the transcription factor FOXP3 which is crucial for Treg cell function (PubMed: 23973222).</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                   |
|----------------------------------|---------------------------------------------------|
| NCBI GI #                        | 1013061510                                        |
| NCBI GeneID                      | 7874                                              |
| NCBI Accession #                 | NP_001308787.1                                    |
| NCBI GenBank Nucleotide #        | NM_001321858.1                                    |
| UniProt Accession #              | Q93009; A6NMY8; B7Z815; H0Y3G8                    |
| Molecular Weight                 | ~ Da                                              |
| NCBI Official Full Name          | ubiquitin carboxyl-terminal hydrolase 7 isoform 4 |
| NCBI Official Synonym Full Names | ubiquitin specific peptidase 7                    |
| NCBI Official Symbol             | USP7                                              |
| NCBI Official Synonym Symbols    | TEF1; HAUSP                                       |
| NCBI Protein Information         | ubiquitin carboxyl-terminal hydrolase 7           |
| UniProt Protein Name             | Ubiquitin carboxyl-terminal hydrolase 7           |
| UniProt Gene Name                | USP7                                              |
| UniProt Synonym Gene Names       | HAUSP                                             |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

