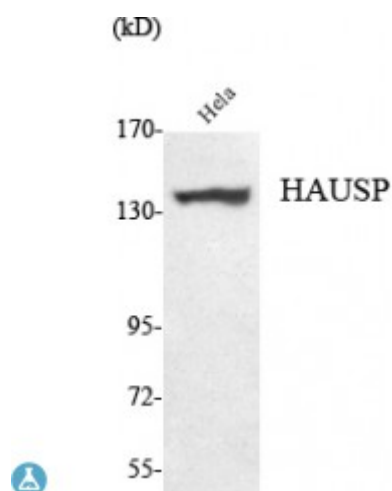


Anti-HAUSP antibody



Description	Mouse monoclonal to HAUSP.
Model	STJ98495
Host	Mouse
Reactivity	Canine, Human, Mouse, Rat, Swine
Applications	IF, WB
Immunogen	Purified recombinant human HAUSP (C-terminal) protein fragments expressed in E.coli.
Immunogen Region	C-terminal
Gene ID	7874
Gene Symbol	USP7
Dilution range	WB 1:1000-1:2000IF 1:100-1:500
Specificity	HAUSP Monoclonal Antibody detects endogenous levels of HAUSP protein.
Tissue Specificity	Widely expressed. Overexpressed in prostate cancer.
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Ubiquitin carboxyl-terminal hydrolase 7 Deubiquitinating enzyme 7 Herpesvirus-associated ubiquitin-specific protease Ubiquitin thioesterase 7 Ubiquitin-specific-processing protease 7
Clonality	Monoclonal
Conjugation	Unconjugated

Formulation	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:12630OMIM:602519
Alternative Names	Ubiquitin carboxyl-terminal hydrolase 7 Deubiquitinating enzyme 7 Herpesvirus-associated ubiquitin-specific protease Ubiquitin thioesterase 7 Ubiquitin-specific-processing protease 7
Function	<p>Hydrolase that deubiquitinates target proteins such as FOXO4, p53/TP53, MDM2, ERCC6, DNMT1, UHRF1, PTEN and DAXX . 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 .</p> <p>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 . 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 . 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 . Able to mediate deubiquitination of histone H2B; it is however unsure whether this activity takes place in vivo . 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 . (Microbial infection) Contributes to the overall stabilization and trans-activation capability of the herpesvirus 1 trans-acting transcriptional protein ICP0/VMW110 during HSV-1 infection.</p>
Sequence and Domain Family	The C-terminus plays a role in its oligomerization.
Cellular Localization	Nucleus Cytoplasm Nucleus, PML body Chromosome. 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.
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.

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