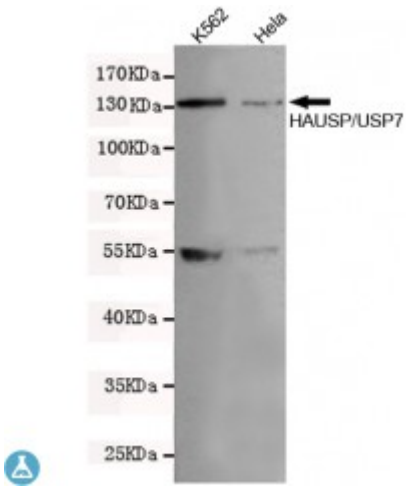
Anti-HAUSP/USP7 antibody



Description	Mouse monoclonal to HAUSP/USP7.

Model	STJ99076
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Purified recombinant human HAUSP / USP7 protein fragments expressed in E.coli.
Gene ID	7874
Gene Symbol	USP7
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of HAUSP / USP7 and does not cross-react with related proteins.
Tissue Specificity	Widely expressed. Overexpressed in prostate cancer.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	3E4-D10-E8
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

Molecular Weight	135kDa
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
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	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 . 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.
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.