

USP22 Antibody

Rabbit mAb Catalog # AP92129

Product Information

ApplicationWB, IF, ICC, IPPrimary AccessionQ9UPT9

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names Ubiquitin carboxyl terminal hydrolase 22; Usp22; USP3L;

IsotypeRabbit IgGHostRabbitCalculated MW59961

Additional Information

Dilution WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:50

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human USP22

Description Histone deubiquitinating component of the transcription regulatory histone

acetylation (HAT) complex SAGA. Catalyzes the deubiquitination of both

histones H2A and H2B, thereby acting as a coactivator.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name USP22

Synonyms KIAA1063, USP3L

Function Deubiquitinase that plays a role in several cellular processes including

transcriptional regulation, cell cycle progression or innate immunity. As part of the transcription regulatory histone acetylation (HAT) complex SAGA, catalyzes the deubiquitination of both histones H2A and H2B, thereby acting as a transcriptional coactivator (PubMed:18206972, PubMed:18206973, PubMed:18469533). Recruited to specific gene promoters by activators such as MYC, where it is required for transcription. Facilitates cell-cycle progression by stabilizing CCNB1 and antagonizing its proteasome-mediated degradation in a cell cycle-specific manner (PubMed:27030811). Modulates cell cycle progression and apoptosis also by antagonizing TP53 transcriptional activation through deacetylase SIRT1 stabilization (PubMed:22542455). Plays multiple roles in immunity and inflammation. Participates in antiviral response by deubiquitinating the importin KPNA2, leading to IRF3 nuclear translocation and subsequent type I interferon production

(PubMed:32130408). Acts as a central regulator of type III IFN signaling by negatively regulating STING1 activation and ubiquitination (PubMed:35933402). Inhibits NLRP3 inflammasome activation by promoting NLRP3 degradation through ATG5-dependent autophagy (By similarity). Deubiquitinates CD274 to induce its stabilization and thereby participates in maintenance of immune tolerance to self (PubMed:31399419). Controls necroptotic cell death by regulating RIPK3 phosphorylation and ubiquitination (PubMed:33369872). During bacterial infection, promotes pro-inflammatory response by targeting TRAF6 and removing its 'Lys-48'-linked polyubiquitination (By similarity).

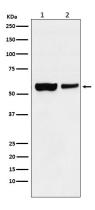
Cellular Location

Nucleus. Cytoplasm {ECO:0000250 | UniProtKB:Q5DU02}

Tissue Location

Moderately expressed in various tissues including heart and skeletal muscle, and weakly expressed in lung and liver

Images



Western blot analysis of USP22 expression in (1) HeLa cell lysate; (2) Mouse spleen lysate.

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