10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

USP22 Antibody

Rabbit mAb
Catalog # AP91549

Product Information

Application	WB, IF, FC, ICC, IP
Primary Accession	Q9UPT9
Reactivity	Human
Clonality	Monoclonal
Other Names	Deubiquitinating enzyme 22; Ubiquitin carboxyl terminal hydrolase 22; Usp22; USP3L;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	59961

Additional Information

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

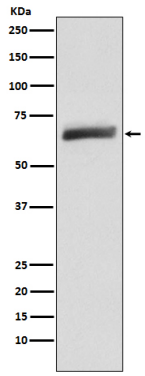
Cellular Location

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 HeLa cell lysate.

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