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# USP22 Antibody (C-term)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2230b

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q9UPT9 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | IgG1 |
| **Clone Names** | 1154CT13.1.3.1 |
| **Calculated MW** | 59961 |

## Additional Information

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| **Gene ID** | 23326 |
| **Other Names** | Ubiquitin carboxyl-terminal hydrolase 22, Deubiquitinating enzyme 22, Ubiquitin thioesterase 22, Ubiquitin-specific-processing protease 22, USP22, KIAA1063, USP3L |
| **Target/Specificity** | Purified His-tagged USP22 protein was used to produced this monoclonal antibody. |
| **Dilution** | WB~~1:500 E~~Use at an assay dependent concentration. |
| **Format** | Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | USP22 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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, |

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| | 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 |

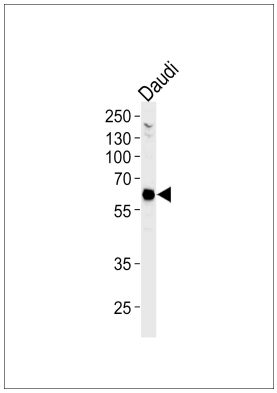
## Background

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. Recruited to specific gene promoters by activators such as MYC, where it is required for transcription. Required for nuclear receptor-mediated transactivation and cell cycle progression.

## References


Kikuno R., et al. DNA Res. 6:197-205(1999).
Bechtel S., et al. BMC Genomics 8:399-399(2007).
Lee H.-J., et al. Gene Expr. Patterns 6:277-284(2006).
Zhao Y., et al. Mol. Cell 29:92-101(2008).
Zhang X.-Y., et al. Mol. Cell 29:102-111(2008).


## Images




USP22 Antibody (C-term)(Cat. #AM2230b) western blot analysis in Daudi cell line lysates (35µg/lane).This demonstrates the USP22 antibody detected the USP22 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.