

USP22 Antibody (C-term)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2230b

Specification

USP22 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q9UPT9
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1

USP22 Antibody (C-term) - Additional Information

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~~1:1000

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.

USP22 Antibody (C-term) - 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

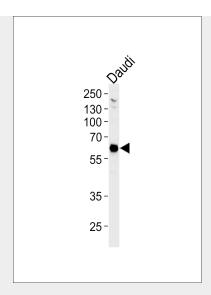
USP22 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

USP22 Antibody (C-term) - 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).

USP22 Antibody (C-term) - 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.

USP22 Antibody (C-term) - 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).