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USP22 Antibody (C-term)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2230b

Product Information

Application	WB, E
Primary Accession	Q9UPT9
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	1154CT13.1.3.1
Calculated MW	59961

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~~1:500 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

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

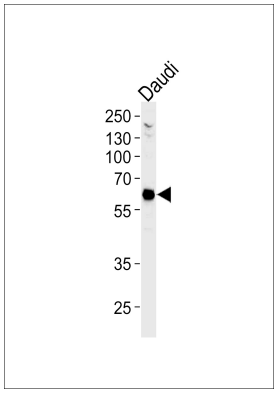
Background

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'.