

USP44 Polyclonal Antibody

Catalog # AP73024

Product Information

Application	WB, E
Primary Accession	Q9H0E7
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	81185

Additional Information

Gene ID	84101
Other Names	USP44; Ubiquitin carboxyl-terminal hydrolase 44; Deubiquitinating enzyme 44; Ubiquitin thioesterase 44; Ubiquitin-specific-processing protease 44
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	USP44
Function	Deubiquitinase that plays a key regulatory role in the spindle assembly checkpoint or mitotic checkpoint by preventing premature anaphase onset. Acts by specifically mediating deubiquitination of CDC20, a negative regulator of the anaphase promoting complex/cyclosome (APC/C) (PubMed:17443180). Deubiquitination of CDC20 leads to stabilize the MAD2L1-CDC20-APC/C ternary complex (also named mitotic checkpoint complex), thereby preventing premature activation of the APC/C (PubMed:17443180). Promotes association of MAD2L1 with CDC20 and reinforces the spindle assembly checkpoint (PubMed:17443180). Also promotes the deubiquitination of histone H2A and H2B (PubMed:23615962, PubMed:27880911). Recruited to RNF8/RNF168- ubiquitinated chromatin surrounding double stranded breaks (DSBs), promotes hydrolysis of such ubiquitin conjugates, thus negatively regulating protein recruitment to damaged chromatin (PubMed:23615962). Participates in nucleotide excision repair (NER) pathway by deubiquitinating DDB2 to prevent its premature degradation so it can remain on damaged chromatin (By similarity). Promotes FOXP3 stabilization through 'Lys-48'-linked deubiquitination leading to increased stability and increased

regulatory T-cell lineage stability (PubMed:[32644293](#)). Also plays a positive role in innate immune response to DNA viruses by deubiquitinating STING1, selectively removing its 'Lys-48'-linked polyubiquitin chains and stabilizing it (PubMed:[31968013](#)).

Cellular Location

Nucleus. Cytoplasm Note=Peaks in interphase, with relatively low levels maintained throughout mitosis.

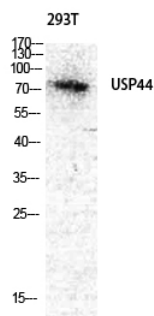
Tissue Location

Expressed in testis. Expressed at high levels in T- cell acute lymphoblastic leukemia.

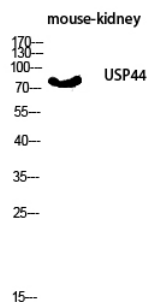
Background

Deubiquitinase that plays a key regulatory role in the spindle assembly checkpoint or mitotic checkpoint by preventing premature anaphase onset. Acts by specifically mediating deubiquitination of CDC20, a negative regulator of the anaphase promoting complex/cyclosome (APC/C). Deubiquitination of CDC20 leads to stabilize the MAD2L1-CDC20-APC/C ternary complex (also named mitotic checkpoint complex), thereby preventing premature activation of the APC/C. Promotes association of MAD2L1 with CDC20 and reinforces the spindle assembly checkpoint. Acts as a negative regulator of histone H2B (H2BK120ub1) ubiquitination.

Images



Western Blot analysis of 293T cells using USP44 Polyclonal Antibody diluted at 1 : 2000. Secondary antibody was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Western blot analysis of mouse-kidney lysis using USP44 antibody. Antibody was diluted at 1:2000. Secondary antibody was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).

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