

USP51 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20473c

Specification

USP51 Antibody (Center) - Product Information

Application	IF, WB,E
Primary Accession	O70EK9
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	79756
Antigen Region	278-307

USP51 Antibody (Center) - Additional Information

Gene ID 158880

Other Names

Ubiquitin carboxyl-terminal hydrolase 51, Deubiquitinating enzyme 51, Ubiquitin thioesterase 51, Ubiquitin-specific-processing protease 51, USP51

Target/Specificity

This USP51 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 278-307 amino acids from the Central region of human USP51.

Dilution

IF~~1:25

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

USP51 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

USP51 Antibody (Center) - Protein Information

Name USP51 ([HGNC:23086](#))

Function Specifically deubiquitinates 'Lys-14' (H2AK13Ub) and 'Lys- 16'(H2AK15Ub) of histone

H2A regulating the DNA damage response at double-strand breaks (DSBs) (PubMed:[27083998](#), PubMed:[33022275](#)). USP51 is recruited to chromatin after DNA damage and regulates the dynamic assembly/disassembly of TP53BP1 and BRCA1. Functions in DNA double-strand break repair also by mediating the deubiquitination and subsequent stabilization of DGCR8, leading to the recruitment of DGCR8 binding partners to double strand breaks such as RNF168 or MDC1 (PubMed:[34188037](#)). In addition, promotes the deubiquitination and stabilization of the transcriptional repressor ZEB1 (PubMed:[29119051](#)).

Cellular Location

Chromosome. Note=Upon DNA damage, chromatin-bound USP51 disassociates from chromatin immediately following DNA damage and reassociates with chromatin following DNA repair

Tissue Location

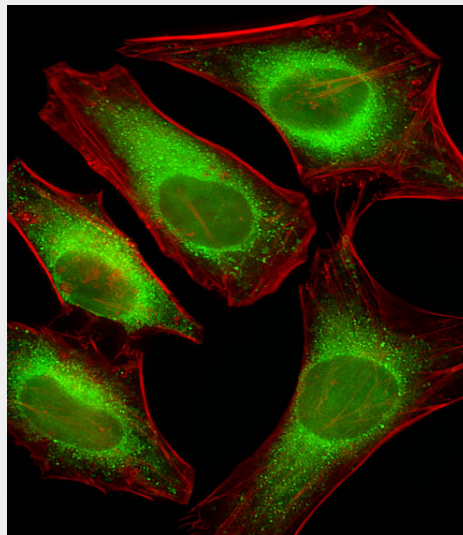
Expressed in prostate, brain, lung, aorta and kidney.

USP51 Antibody (Center) - Protocols

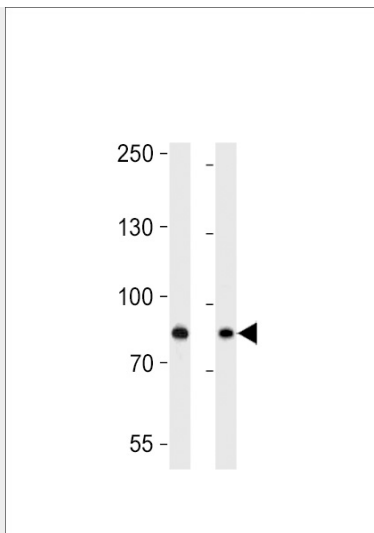
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

USP51 Antibody (Center) - Images



Fluorescent image of HeLa cells stained with USP51 Antibody (Center)(Cat#AP20473C). AP20473C was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).



USP51 Antibody (Center) (Cat. #AP20473c) western blot analysis in HepG2, MCF-7 cell line lysates (35ug/lane). This demonstrates the USP51 antibody detected the USP51 protein (arrow).

USP51 Antibody (Center) - References

- Quesada V., et al. *Biochem. Biophys. Res. Commun.* 314:54-62(2004).
- Ross M.T., et al. *Nature* 434:325-337(2005).
- Puente X.S., et al. *Genome Res.* 14:609-622(2004).