

Anti-USP51 Antibody
Rabbit polyclonal antibody to USP51
Catalog # AP61444

Specification

Anti-USP51 Antibody - Product Information

Application	WB
Primary Accession	O70EK9
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79756

Anti-USP51 Antibody - Additional Information

Gene ID 158880

Other Names

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

Target/Specificity

Recognizes endogenous levels of USP51 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-USP51 Antibody - 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

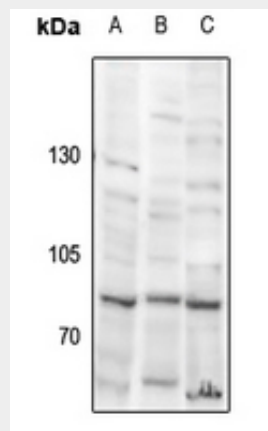
Expressed in prostate, brain, lung, aorta and kidney.

Anti-USP51 Antibody - Protocols

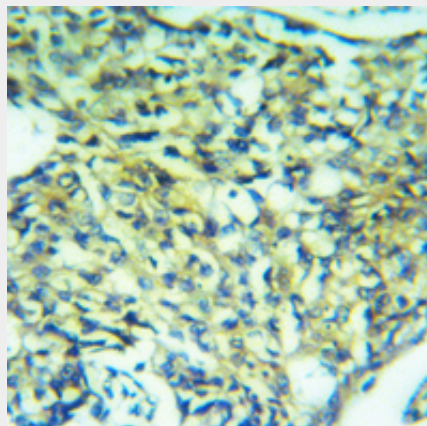
Provided below are standard protocols that you may find useful for product applications.

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

Anti-USP51 Antibody - Images



Western blot analysis of USP51 expression in CT26 (A), A549 (B), EC9706 (C) whole cell lysates.



Immunohistochemical analysis of USP51 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-USP51 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human USP51. The exact sequence is proprietary.