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Anti-USP51 Antibody

Catalog # AP61444

Product Information

Application	WB, IHC
Primary Accession	Q70EK9
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79756

Additional Information

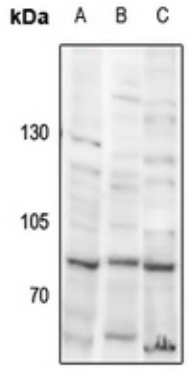
Gene ID	158880
Other Names	Ubiquitin carboxyl-terminal hydrolase 51; Deubiquitinating enzyme 51; Ubiquitin thioesterase 51; Ubiquitin-specific-processing protease 51
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human USP51. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

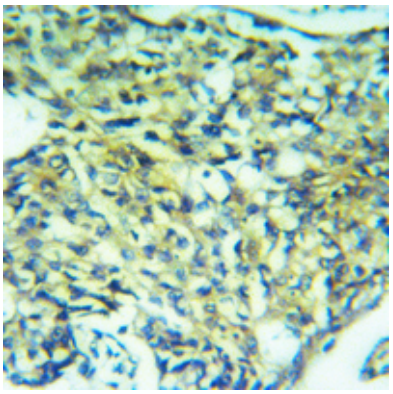
Name	USP51 (HGNC:23086)
Function	Specifically deubiquitinates 'Lys-14' (H2AK13Ub) and 'Lys- 16'(H2AK15Ub) of histone H2A regulating the DNA damage response at double-strand breaks (DSBs) (PubMed:27083998, PubMed:33022275). USP51 is recruited to chromatin after DNA damage and regulates the dynamic assembly/disassembly 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.

Images



Western blot analysis of USP51 expression in CT26 (A), A549 (B), EC9706 (C) whole cell lysates. (Predicted band size: 79 kD; Observed band size: 79 kD)



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.

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