

# USP21 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2147a

## Product Information

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<b>Application</b>	IHC-P, WB, E
<b>Primary Accession</b>	<a href="#">Q9UK80</a>
<b>Other Accession</b>	<a href="#">Q2KJ72</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB4355/4356
<b>Calculated MW</b>	62656
<b>Antigen Region</b>	406-436

## Additional Information

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<b>Gene ID</b>	27005
<b>Other Names</b>	Ubiquitin carboxyl-terminal hydrolase 21, Deubiquitinating enzyme 21, Ubiquitin thioesterase 21, Ubiquitin-specific-processing protease 21, USP21, USP23
<b>Target/Specificity</b>	This USP21 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 406-436 amino acids from the C-terminal region of human USP21.
<b>Dilution</b>	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
<b>Storage</b>	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.
<b>Precautions</b>	USP21 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	USP21 {ECO:0000303 PubMed:10799498, ECO:0000312 HGNC:HGNC:12620}
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<b>Function</b>	Deubiquitinates histone H2A, a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator (By similarity). Deubiquitination of histone H2A releases the repression of di- and trimethylation of histone H3 at 'Lys-4', resulting in regulation of transcriptional initiation (By similarity). Regulates gene expression via histone H2A deubiquitination (By similarity). Deubiquitinates BAZ2A/TIP5 leading to its stabilization (PubMed: <a href="#">26100909</a> ). Also capable of removing NEDD8 from NEDD8 conjugates but has no effect on Sentrin-1 conjugates (PubMed: <a href="#">10799498</a> ). Also acts as a negative regulator of the ribosome quality control (RQC) by mediating deubiquitination of 40S ribosomal proteins RPS10/eS10 and RPS20/uS10, thereby antagonizing ZNF598-mediated 40S ubiquitination (PubMed: <a href="#">32011234</a> ).
<b>Cellular Location</b>	Cytoplasm. Nucleus
<b>Tissue Location</b>	Highly expressed in heart, pancreas and skeletal muscle. Also expressed in brain, placenta, liver and kidney, and at very low level in lung.

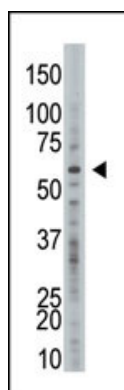
## Background

USP21 is a ubiquitin-specific protease, an enzyme that removes ubiquitin from ubiquitinated proteins. The encoded protein belongs to the C19 peptidase family, also known as family 2 of ubiquitin carboxyl-terminal hydrolases. This protein has been reported to be capable of removing NEDD8 from NEDD8 conjugates.

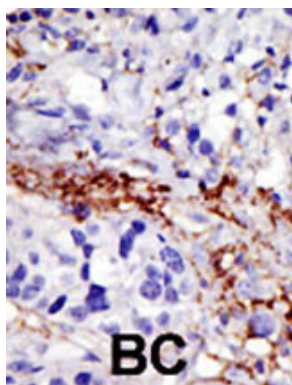
## References

Puente, X.S., et al., Nat. Rev. Genet. 4(7):544-558 (2003).  
Gong, L., et al., J. Biol. Chem. 275(19):14212-14216 (2000).  
Hillier, L.D., et al., Genome Res. 6(9):807-828 (1996).  
Smith, T.S., et al., Biochim. Biophys. Acta 1490 (1-2), 184-188 (2000).

## Images



Western blot analysis of anti-USP21 Antibody (C-term) (Cat. #AP2147a) in T47D cell line lysates (35ug/lane). USP21 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



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