

USP21 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1069a

Specification

USP21 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	O9UK80
Other Accession	B2GUX4 , O9OZL6 , O2KJ72
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

USP21 Antibody (N-term) - Additional Information

Gene ID 27005

Other Names

Ubiquitin carboxyl-terminal hydrolase 21, Deubiquitinating enzyme 21, Ubiquitin thioesterase 21, Ubiquitin-specific-processing protease 21, USP21, USP23

Target/Specificity

This USP21 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human USP21.

Dilution

WB~~1:2000
IHC-P~~1:50~100

Format

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.

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

USP21 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

USP21 Antibody (N-term) - Protein Information

Name USP21 {ECO:0000303|PubMed:10799498, ECO:0000312|HGNC:HGNC:12620}

Function 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:[26100909](#)). Also capable of removing NEDD8 from NEDD8 conjugates but has no effect on Sentrin-1 conjugates (PubMed:[10799498](#)). 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:[32011234](#)).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

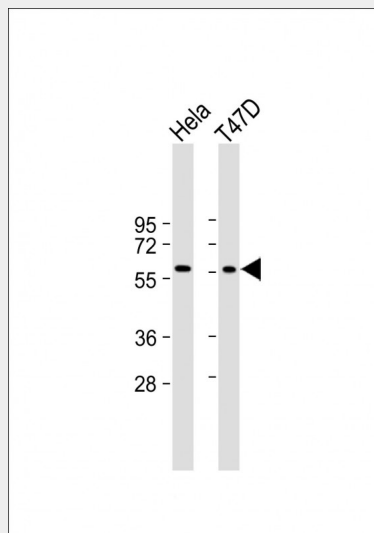
Highly expressed in heart, pancreas and skeletal muscle. Also expressed in brain, placenta, liver and kidney, and at very low level in lung.

USP21 Antibody (N-term) - Protocols

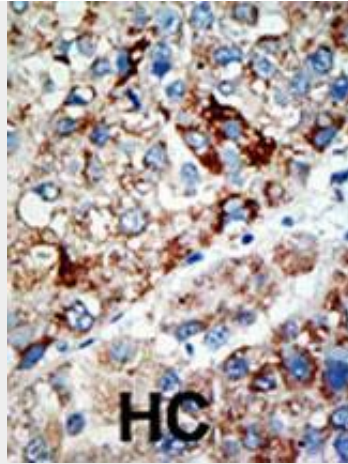
Provided below are standard protocols that you may find useful for product applications.

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

USP21 Antibody (N-term) - Images



All lanes : Anti-hUSP21-M1 at 1:2000 dilution Lane 1: HeLa whole cell lysate Lane 2: T47D whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



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

USP21 Antibody (N-term) - 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.

USP21 Antibody (N-term) - 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).

USP21 Antibody (N-term) - Citations

- [Porcine circovirus type 2 infection attenuates the K63-linked ubiquitination of STING to inhibit IFN- \$\beta\$ induction via p38-MAPK pathway](#)
- [The deubiquitinase USP21 maintains the stemness of mouse embryonic stem cells via stabilization of Nanog.](#)
- [Deubiquitination and stabilization of IL-33 by USP21.](#)
- [Identification of the E3 deubiquitinase ubiquitin-specific peptidase 21 \(USP21\) as a positive regulator of the transcription factor GATA3.](#)